EPA Reg. No. 87655-2
Volume 1

Material Sent for Data Extraction

Reg # 87655-2

Description: CORRECTION TO NOTICE OF REGISTRATION

☐ Material(s) Sent to Data Extraction Contractors:

- ☐ New Stamped Label Dated _____
- ☐ Notification Dated _____
- ☐ New CSF(s) Dated _____
- ☒ Other: UPLOAD CORRECTED NOTICE OF REG & STAMPED LABEL TO PPLS.

☒ Decision #: 4111115

☒ Other Action/Comments: PLEASE RE-IMAGE JUNE 27, 2011 NOTICE OF REGISTRATION AND STAMPED LABEL TO PPLS.

Attach this coversheet to the top of the material or jacket. It must be well organized and clipped together, NOT STAPLED. Then give the material with this coversheet to staff in the Information Services Center (Room S-4900).

Reviewer: MICHAEL WALSH

Phone: 508-2972 Division: RD/HB

Date: 6/4/12

Created February 3, 2011

REPLACEMENT OF NOTICE OF REGISTRATION CURRENTLY IN PPLS. SEE NEXT PAGE.

ATTENTION: PPLS CONTRACTORS

Minor corrections were made to the original Notice of Registration dated June 27, 2011.

Please upload the corrected Notice of Registration dated June 27, 2011 as the REPLACEMENT for the original June 27, 2011 Notice and label currently in PPLS.

Please feel free to call me if you have any questions.

Thanks.

Mike Walsh, Tel: 308-2972
Registration Division

Material Sent for Data Extraction

Reg # 87655-2

Description: NEW PRODUCT REGISTRATION

☐ Material(s) Sent to Data Extraction Contractors:

☒ New Stamped Label Dated 6/27/11

☐ Notification Dated _____

☒ New CSF(s) Dated 5/26/11

☐ Other: _____

☒ Decision #: 474178

☐ Other Action/Comments: _____

Attach this coversheet to the top of the material or jacket. It must be well organized and clipped together, NOT STAPLED. Then give the material with this coversheet to staff in the Information Services Center (Room S-4900).

Reviewer: Heather Walsh

Phone: 308-2972 Division: RCD/HB

Date: 6/27/11

Created February 3, 2011

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

Mr. Robert Hawk, Agent
Orion Fomes, LLC
P.O. Box 21720
Mesa, AZ 85277

Subject: Corrected Notice of Registration Dated June 27, 2011
Product Names: Fomesafen 2 SL Herbicide
EPA Registration Number 87655-2
Associated Decision Number: 441198

Dear Mr. Hawk:

During a review of our records for EPA Registration Number 87655-2, we discovered two errors in the original Notice of Registration dated June 27, 2011. Each of the errors has been corrected in the attached revised Notice of Registration. The revised Notice retains the original date of product registration in order to avoid both internal and external confusion.

The appropriate FIFRA reference for an unconditional product registration is 3(c)(5), not 3(c)(7)(A) as seen in the original product registration document. Additionally, the First Aid requirements in the original Notice lists "IF ON SKIN" twice, which is not accurate. The First Aid text as presented in the final printed label submitted by you on October 10, 2011 is accurate. While these may seem like minor errors, we believe issuing a revised Notice is critical to assuring accurate information is made available to program stakeholders.

The revised Notice of Registration is intended to replace the original Notice of Registration and will remain on file here as a replacement bearing the same date. As the replacement document, the revised Notice of Registration will be uploaded with the original stamped label to the Pesticide Product Label System (PPLS) where it will remain accessible to our State regulatory partners and the general public.

If you have any questions regarding this revised Notice of Registration, please feel free to contact Mike Walsh by telephone at 703-308-2972 or via email at "walsh.michael@epa.gov".

Sincerely,

Kathryn V. Montague
Product Manager (23)
Herbicide Branch
Registration Division (7505P)

Enclosure

Orion Fomes final label Oct. 10, 2011

[illegible]

For control of certain weeds in cotton, dry beans, snap beans and soybeans

GROUP 14 HERBICIDE

ACTIVE INGREDIENT

Sodium salt of fomesafen [5-[2-chloro-4-trifluoromethyl)phenoxy]-*N*-(methylsulfonyl)-2-nitrobenzamide]	22.8%
OTHER INGREDIENTS:	77.2%
TOTAL	**100.0%**

Contains 1,2-benzisothiazolin-3-one at 0.02% as a preservative
Equivalent to 21.7% fomesafen or 2 pounds per gallon fomesafen

KEEP OUT OF REACH OF CHILDREN
DANGER/PELIGRO

Si usted no entiende la etiqueta, busque al alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

See Additional Preeautionary Statements and Directions for Use on label.

FIRST AID

IF IN EYES	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
IF ON SKIN OR CLOTHING	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
IF SWALLOWED	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
IF INHALED	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.

For MEDICAL Emergencies 24 Hours a Day Call a Poison Control Center at 1-800-222-1222.
For CHEMICAL Emergency Assistance (Spill, Fire or Accident) Call ChemTrec at 1 800-424-9300
Have the product container or label with you when calling a Poison Control Center or doctor or going for treatment.

NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric lavage. There is no specific antidote for this product; treat symptomatically. Persons suffering a temporary allergic reaction may respond to treatment with systemic steroids or antihistamines.

Orion Fomes, LLC
P.O. Box 21720
Mesa, AZ 85277
Tel. 480-218-4289

EPA Reg. No. 87655-2
EPA Est. No.
Net Contents: 2.5 gal

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER

CORROSIVE. CAUSES IRREVERSIBLE EYE DAMAGE. DUE TO CORROSIVE NATURE, MAY BE HARMFUL OR FATAL IF SWALLOWED. HARMFUL IF INHALED OR ABSORBED THROUGH SKIN. Do not get in eyes, on skin or on clothing. Avoid breathing vapors or spray mist.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as barrier laminate or Viton
- Shoes plus socks
- Protective eyewear (goggles, face shield or safety glasses)

In addition, for aerial applications mixers and loaders handling more than 140 gallons of Fomesafen 2 SL Herbicide in any single workday must wear:

- Dust/mist filtering NIOSH-approved respirator with any N, R. P or HE filter.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instruction for washables exists, use detergent and hot water. Keep and wash PPE separately from other laundry.

When handlers use closed systems, enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)]. The handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

- Remove and wash contaminated clothing before reuse.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash-waters. Do not apply when weather conditions favor drift from target area.

GROUNDWATER ADVISORY

This chemical is known to leach through soil into groundwater under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.

PPE required for early entry into treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated such as plants, soil, or water, is:

- Coveralls
- Chemical-resistant gloves such as barrier laminate or Viton.
- Shoes plus socks
- Protective eyewear

PRODUCT INFORMATION

Read all label directions before using.

Fomesafen 2 SL Herbicide is a selective herbicide which may be applied preplant surface,

preemergence and/or postemergence for control or partial control of broadleaf weeds, grasses and sedges in cotton, dry beans, snap beans and soybeans.

Preplant Surface and Preemergence Applications

Certain germinating broadleaf weeds, grasses and sedges can be controlled or partially controlled by soil residual activity from either preplant surface or preemergence applications of Fomesafen 2 SL Herbicide. Moisture is necessary to activate Fomesafen 2 SL Herbicide in soil for residual weed control. Dry weather following applications of Fomesafen 2 SL Herbicide may reduce effectiveness. When adequate moisture is not received after a Fomesafen 2 SL Herbicide application, weed control may be improved by overhead irrigation with at least a 1/4 inch of water.

Postemergence Applications

Fomesafen 2 SL Herbicide is generally most effective when used postemergence, working through contact action. Therefore, emerged weeds must have thorough spray coverage for effective control. Best broad-spectrum postemergence control of susceptible broadleaf weeds is obtained when Fomesafen 2 SL Herbicide is applied early to actively growing weeds. This usually occurs within 14 to 28 days after planting. Refer to the weed control tables for specific recommendations on weed growth stages and rates.

Some bronzing, crinkling or spotting of labeled crop leaves may occur following postemergence applications, but labeled crops soon outgrow these effects and develop normally.

Soil Characteristics

Application of Fomesafen 2 SL Herbicide to soils with high organic matter and/or high clay content may require higher rates than soils with low organic matter and/or low clay content. Refer to the Fomesafen 2 SL Herbicide Regional Use Map, weed control tables, and specific crop use sections for recommendations on use rates based on soil texture.

Environmental and Agronomic Conditions

Always apply Fomesafen 2 SL Herbicide under favorable environmental conditions that promote active weed growth. Avoid applying Fomesafen 2 SL Herbicide to weeds or labeled crops which are under stress from drought, extreme temperatures, excessive water, low humidity, low soil fertility, mechanical or chemical injury as reduced weed control and/or increased crop injury may result.

Rainfastness

Fomesafen 2 SL Herbicide requires a 1 hour rain-free period for best results when applied postemergence.

Cultivation

Cultivation prior to postemergence application is not recommended. Cultivation may put weeds under stress, reducing weed control. Timely cultivation 1-3 weeks after applying Fomesafen 2 SL Herbicide may assist weed control.

Information on Weed Resistance

Naturally occurring biotypes of certain broadleaf species with resistance to this herbicide and related products (same mode of action) are known to exist. Selection of resistant biotypes, through repeated use of these herbicides, may result in control failures.

If poor performance cannot be attributed to adverse weather conditions or improper application

methods, a resistant biotype may be present. In such a case, additional treatments with this herbicide or similar mode of action products are not recommended. Consult your local company representative or agricultural advisor for assistance.

APPLICATION DIRECTIONS

Drift Management

Avoiding spray drift at the application site is the responsibility of the applicator and the grower. The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator and grower must consider the interaction of equipment and weather-related factors to ensure that the potential for drift to sensitive nontarget plants is minimal.

This pesticide may only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, nontarget plants) is minimal (i.e., when the wind is blowing away from the sensitive area).

Spray Additives

Only spray additives cleared for use on growing crops under 40 CFR 180.1001 may be used in spray mixture.

For Postemergence Applications Always Add One Of The Following Except in Tank Mix With Products Prohibiting Spray Additives:

Nonionic Surfactant (NIS) -Use NIS containing at least 75% surface active agent at 0.25 to 0.5% v/v (1-2 qts./100 gals.) of the finished spray volume.

Crop Oil Concentrate (COC) - Use a nonphytotoxic COC containing 15-20% approved emulsifier, at 0.5-1% v/v (0.5-1 gal./100 gals.) of the finished spray volume. COC can improve weed control but may slightly reduce crop tolerance.

Other Adjuvants -Adjuvants other than COC or NIS may be used providing the product meets the following criteria:

1. Contains only EPA exempt ingredients.
2. Is nonphytotoxic to the target crop.
3. Is compatible in mixture. (May be established through a jar test.)
4. Is supported locally for use with Fomesafen 2 SL Herbicide on the target crop through proven field trials and through university and extension recommendations.

Note: No adjuvants are needed for preplant surface or preemergence applications unless Fomesafen 2 SL Herbicide is being used in a burndown on emerged weeds.

Recommended Mixing Order:

1. Fill the spray tank with half the required amount of water and begin agitation.*
2. Add dry pesticide formulations.
3. Add Fomesafen 2 SL Herbicide Herbicide.
4. Add liquid pesticide formulations.
5. Add spray adjuvant and fertilizer (if used).
6. Add the remaining water and maintain agitation throughout the spray operation.

*Compatibility agent, 1 gallon/500 gallons of water or 0.2% v/v, may be added as needed.

GROUND APPLICATION Preplant Surface and Preemergence Application -Use a

minimum of 10 gallons per acre. Nozzle selection should meet manufacturer's gallonage and pressure recommendations for preplant surface or preemergence applications.

Postemergence Application -Use sufficient spray volume and pressure to ensure complete coverage of the target weed. A spray volume of 10-20 gallons per acre and 30-60 psi at the nozzle tip is recommended. On large weeds and/or dense foliage, use 60 psi and a minimum of 20 gallons per acre to ensure coverage of weed foliage.

The use of flat fan nozzles will result in the most effective post-emergence application of Fomesafen 2 SL Herbicide. Use nozzles that are set up to deliver medium quality spray (ASAE StandardS-572).

DO NOT USE FLOOD TYPE OR OTHER SPRAY NOZZLES, WHICH DELIVER COARSE, LARGE DROPLET SPRAYS.

BAND APPLICATIONS

Calculate the amount of herbicide and water volume needed for band treatment by the following formulas:

band width in inches row width in inches	X	broadcast rate per acre	=	band herbicide rate per acre
band width in inches row width in inches	X	broadcast volume per acre	=	band water volume per acre

Note: Thorough weed coverage is important for postemergence band applications. Best coverage is obtained with a minimum of two nozzles, one directed to each side of the planted row. Application with a single nozzle directed over the top of the row is not recommended for postemergence applications but is suitable for preemergence applications. Cultivation of untreated areas may be needed following band applications. When making postemergence band applications and cultivating in the same operation, position nozzles in advance of the cultivation device. This will reduce dust in the spray area. Dust can intercept spray, reducing weed coverage resulting in less than adequate weed control.

AERIAL APPLICATION

Use sufficient spray volume and pressure to ensure complete coverage of the target. A minimum of 5 gallons per acre of spray mixture should be applied with a maximum of 40 PSI pressure. When foliage is dense, use a minimum of 10 gallons per acre to ensure coverage of weed foliage.

DO NOT APPLY THIS PRODUCT THROUGH ANY TYPE OF IRRIGATION SYSTEM.

RESTRICTIONS AND PRECAUTIONS

- A maximum of 1.5 pts. of Fomesafen 2 SL Herbicide **(or a maximum of 0.375 lb. a.i./A of fomesafen from any product containing fomesafen)** may be applied per acre per year in Region 1 (see Regional Use Map).
- A maximum of 1.5 pts. of Fomesafen 2 SL Herbicide **(or a maximum of 0.375 lb. a.i./A of fomesafen from any product containing fomesafen)** may be applied per acre in

ALTERNATE years in Region 2 (see Regional Use Map).

- A maximum of 1.25 pts. of Fomesafen 2 SL Herbicide **(or a maximum of 0.313 lb. a.i./A of fomesafen from any product containing fomesafen)** may be applied per acre in ALTERNATE years in Region 3 (see Regional Use Map).
- A maximum of 1 pt. of Fomesafen 2 SL Herbicide **(or a maximum of 0.25 lb. a.i./A of fomesafen from any product containing fomesafen)** may be applied per acre in ALTERNATE years in Region 4 (see Regional Use Map).
- A maximum of 0.75 pt. of Fomesafen 2 SL Herbicide **(or a maximum of 0.1875 lb. a.i./A of fomesafen from any product containing fomesafen)** may be applied per acre in ALTERNATE years in Region 5 (see Regional Use Map).
- Thoroughly clean the spray system with water and a commercial tank cleaner before and after each use.
- Tank mixes of Fomesafen 2 SL Herbicide with other pesticides, fertilizers or any other additives except as specified on this label or other approved Source Dynamics supplemental labels may result in tank-mix incompatibility, unsatisfactory performance or unsatisfactory crop injury.
- Avoid overlapping spray swaths, as injury may occur to rotational crops.
- To provide adequate coverage, it is recommended that groundspeed not exceed 10 mph during application.
- Avoid drift to all other crops and nontarget areas. Crops other than those labeled may be severely injured by drift. Do not apply when wind velocity exceeds 15 mph.
- Do not make ground or aerial application during temperature inversions.

Replanting

If replanting is necessary in fields previously treated with Fomesafen 2 SL Herbicide, the field may be replanted to cotton, dry beans, snap beans or soybeans. During replanting, a minimum of tillage is recommended to preserve the herbicide barrier for effective weed control. Do not apply a second application of Fomesafen 2 SL Herbicide or other fomesafen containing product as crop injury or illegal residues may occur in harvested crops. If tank-mix combinations were used, refer to product labels for any additional replanting instructions.

ROTATIONAL CROP RESTRICTIONS

The following rotational crops may be planted after applying Fomesafen 2 SL Herbicide at recommended rates:

Crop to be Planted	**Minimum Rotation Interval (Months After Last Fomesafen Application)**
Cotton, dry beans, snap beans and soybeans	0
Small grains such as wheat barley and rye	4
Corn*, peanuts, peas, rice and seed corn	10

To avoid crop injury do not plant alfalfa, sunflowers, sugar beets, sorghum** or any other crop within	18

Do not graze rotated small grain crops or harvest forage or straw for livestock.

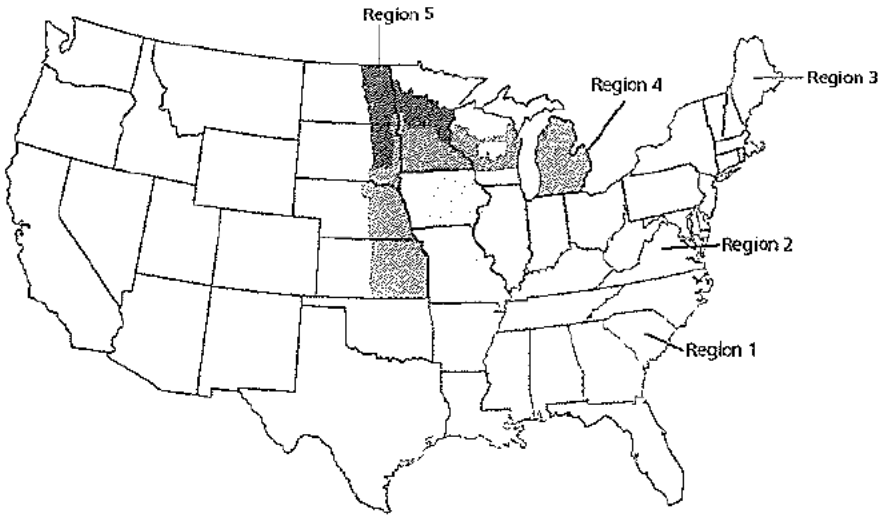
*Use a 12 month minimum rotation interval for popcorn in the states of Ohio, Kentucky, Illinois, Indiana, Iowa, and Region 4 when applied at rates of 1.0 pint per acre or more.

*Use 18 month minimum rotation interval for sweet corn in the states of Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, Vermont and Region 5.

**Sorghum may be planted back after 10 months in Region 1.

USE RATES AND WEEDS CONTROLLED

FOMESAFEN 2 SL REGIONAL USE MAP



REGION 1(Maximum Rate 1.5 pts./A per year)

REGION 1-Includes the following states or portion of states where Fomesafen 2 SL Herbicide may be applied: Alabama, Arkansas, Georgia, Louisiana, Mississippi, Missouri (counties of Bollinger, Butler, Cape Giradeau, Dunklin, Madison, Mississippi, New Madrid, Pemiscot, Perry, Ripley, Scott, Stoddard and Wayne), North Carolina, Oklahoma (East of U.S. Highway 75 and East of Indian Nation Parkway), South Carolina, Tennessee, and Texas (includes area East of U.S. Highway 77 to State Road 239 including all of Calhoun County).

REGION 2 (Maximum Rate 1.5 pts./A, alternate years)

REGION 2 -Includes the following states or portion of states where Fomesafen 2 SL Herbicide may be applied: Delaware, Kentucky, Maryland, Virginia, West Virginia, South of Interstate 70 in the following states: Illinois, Indiana and Ohio and all areas South of Interstate 80 to the intersection of U.S. Highway 15 and East of U.S. Highway 15 and U.S. Highway 522 in Pennsylvania.

REGION 3 (Maximum Rate 1.25 pts./A, alternate years)

REGION 3 -Includes the following states or portion of states where Fomesafen 2 SL Herbicide may be applied: Connecticut, Iowa, Maine, Massachusetts, Missouri (all counties except for those listed in Region 1), New Hampshire, New Jersey, New York, Pennsylvania (all areas except those listed in Region 2), Rhode Island, Vermont and Wisconsin (South of U.S. Highway 18 between Prairie Du Chien and Madison, and South of Interstate 94 between Madison and Milwaukee), andNorth of Interstate 70 in following states: Indiana, Illinois and Ohio.

REGION 4 (Maximum Rate 1 pint per acre, alternate years)

REGION 4 -Includes the following states or portion of states where Fomesafen 2 SL Herbicide may be applied: Kansas (all counties East of or intersected by U.S. Highway 281), Michigan (Southern Peninsula), Minnesota (all areas South of Interstate 94), Nebraska (all counties East of or intersected by U.S. Highway 281), and Wisconsin (all areas, except those in Region 3, South of Interstate 94 from Minnesota state line to Eau Claire and South of U.S. Highway 29 from Eau Claire to Green Bay plus Barron, Chippewa, Clark, Door, Dunn, Eau Claire, Kewaunee, Marathon, Menominee, Oconto, Polk, Shawano, and St. Croix counties. The following counties are excluded: Adams, Marquette, Portage, Waupaca, Waushara and Wood). North Dakota (all areas East of Interstate 29 from Fargo South to the South Dakota state line). South Dakota (all

areas East of Interstate 29 from the North Dakota state line to Watertown, all areas East of Highway 81 from Watertown to Madison and all areas East and South of State Road 34 and U.S. Highway 281 to the Nebraska state line).

REGION 5 (Maximum Rate 0.75 pint per acre, alternate years)

REGION 5 -Includes the following states or portion of states where Fomesafen 2 SL Herbicide may be applied: North Dakota (all areas East of U.S. Highway 281 except those areas in Region 4), South Dakota (all areas East of U.S. Highway 281 except those areas in Region 4) and Minnesota (all areas South of U.S. Highway 2 except those areas in Region 4).

WEEDS CONTROLLED

Table 1: Weeds controlled or partially controlled* by preemergence activity of Fomesafen 2 SL at 1 to 1.5 pints per acre**

Broadleaf Weeds Controlled	Soil Texture	Organic Matter
Amaranth, Palmer	All soil types	Up to 0.5%
Croton, tropic***		
Eclipta		
Galinsoga spp.		
Lambsquarters, common		
Morningglory, smallflower		
Nightshade, black		
Nightshade, Eastern black		
Pigweed, redroot		
Pigweed, smooth		
Poinsettia, wild		
Purslane, common		
Ragweed, common***		
Sida, prickly***		
Starbur, bristly		
Broadleaf Weeds Partially Controlled*		
Anoda, spurred		
Cocklebur, common		
Morningglory, entireleaf		
Morninglory, ivyleaf		
Morningglory, pitted		
Morningglory, red/scarlet		
Morningglory, tall		
Nightshade, hairy		
Ragweed, giant		
Waterhemp, common		
Sedges Partially Controlled*		
Nutsedge, yellow		

*Partial control means significant activity but not always at a level considered acceptable for commercial weed control.
**Use the higher endof the rate range when heavy weedpopulations are anticipated.
***Rates less than 1.5 pts/A will provide only partial control of this weed.

Table 2: Weeds Controlled or Partially Controlled* by Postemergence Activity of Fomesafen 2 SL Herbicide

Weed	Fomesafen 2L Rate (pints per acre) Maximum Growth Stage Controlled At			
	0.75 pt/A No. of True Leaves	1 pt/A No. of True Leaves	1.25 pt/A No. of True Leaves	1.5 pt/A No. of True Leaves
Anoda, spurred	--	--	--	2
Balloonvine	--	--	2[c]	2
Carpetweed	--	6" diameter size	multi-leaf 6" diameter	unlimited size
Citron (wild watermelon)	--	2	2	4
Cocklebur, common[a,b]	--	--	2	4
Copperleaf, hophornbeam	--	2	2	4
Copperleaf, Virginia	--	2	2	4
Crotalaria, showy	--	4	4	6
Croton, tropic	--	2	2	4
Cucumber, volunteer	--	4	4	6
Eclipta	--	2	2	4
Groundcherry, cutleaf	--	4	4	6
Hemp[b]	--	--	4	6
Horsenettle[b]	--	2[c]	3[c]	4[c]
Jimsonweed	2	4	6	8
Ladysthumb	--	2	2	4
Lambsquarters, common[c]	--	2	2	2
Mexicanweed	--	2[c]	2[c]	2
Morningglory:				
Cypressvine	--	4	4	6
Entireleaf var.	2[c]	2	2	4
Ivyleaf	2[c]	2	2	4
Purple moonflower	--	2	4	4
Red (scarlet)	--	2	2	4
Smallflower	--	2	2	4
Pitted (smallwhite)	--	4	4	4
Tall (common)	2[c]	2	2	3
Palmleaf (willowleaf)	--	2	2	4
Mustard, wild	2	4	6	8
Nightshade, black	2	4	4	4

Table 2 (continued): Weeds Controlled or Partially Controlled* by Postemergence Activity of Fomesafen 2 SL Herbicide

Weed	Fomesafen 2L Rate (pints per acre) Maximum Growth Stage Controlled At			
	0.75 pt/A No. of True Leaves	1 pt/A No. of True Leaves	1.25 pt/A No. of True Leaves	1.5 pt/A No. of True Leaves
Nutsedge, yellow	--	--	--	suppression only
Pigweed:				
Amaranth, Palmer	2[c]	4	4	6
Amaranth, spiny	2[c]	2	2	4
Redroot	2[c]	4	6	6
Smooth	2[c]	4	4	6
Poinsettia, wild	--	--	--	3
Purslane, common	--	multi-leaf 6" diameter	multi-leaf 6" diameter	multi-leaf 8" diameter
Pusley, Florida	--	--	--	2
Ragweed, common	2	4	4	6
Ragweed, Giant[b]	--	--	4	4
Redweed	--	--	--	3c
Sesbania, hemp	--	6	6	12
Sicklepod	--	--	--	cotyledon[c]
Sida, prickly	--	--	--	cotyledon[c]
Smartweed, Pennsylvania	2[c]	4	4	6
Smellmelon	--	--	--	2
Spurge, prostrate	--	--	--	1" diameter[c]
Spurge, spotted	--	--	--	2c
Starbur, bristly	--	2	2	4
Sunflower, common	--	--	--	2
Velvetleaf[b]	--	--	2	4
Venice mallow	2	4	4	6
Witchweed	--	multi-leaf up to 7"	multi-leaf up to 7"	multi-leaf up to 10"
Waterhemp, common	2[c]	2	2	4
Waterhemp, tall	2[c]	2	2	4
Yellow rocket	2	4	6	6

*Partial control means significant activity but not always at a level considered acceptable for commercial weed control.

[a]Do not apply in cotyledon stage.

[b]For effective control of this weed it is necessary to use 1% MSO and 2.5% UAN v/v as an adjuvant in Regions 2 and 3 (soybeans only).

[c]Partial control.

SPECIAL USE DIRECTIONS FOR SPECIAL WEED PROBLEMS

Partial Control* of Annual Grasses

The grasses listed below may be partially controlled by preemergence applications of Fomesafen 2 SL Herbicide at 1-1.5 pts./A.

Crabgrass
Goosegrass
Panicum, Texas
Signalgrass, broadleaf

The grasses listed below may be partially controlled by postemergence applications of Fomesafen 2 SL Herbicide at 1-1.5 pts./A.

Barnyardgrass
Signalgrass, broadleaf
Crabgrass
Foxtail
- Giant
- Green
- Yellow

Goosegrass
Johnsongrass, seedling
Panicum, fall
Panicum, Texas

Partial Control* of Perennial Weeds

Use of Fomesafen 2 SL Herbicide postemergence at rates of 1-1.5 pts./A will aid in suppressing the above-ground portions of the weeds listed below until crop canopy can assist in suppression. Perennial weeds continue to regrow from underground rootstocks even if above-ground foliage is temporarily controlled or retarded. Even though Fomesafen 2 SL Herbicide and crop competition can suppress perennial weeds for a growing season, the rootstocks will continue to live and reestablishment will occur in subsequent years.

Milkweed, climbing
Milkweed, honeyvine
Bindweed, field
Bindweed, hedge
Trumpetcreeper

*Partial control means significant activity but not always at a level considered acceptable for commercial weed control.

CROP USE DIRECTIONS

COTTON Preemergence Application

Apply Fomesafen 2 SL Herbicide preemergence at 1-1.5 pts./A in cotton for control or partial control of the weeds listed in Table 1. Apply as a preemergence treatment only to coarse textured soils (sandy loam, loamy sand, sandy clay loam). **Do not** apply as a preemergence treatment to

medium or fine-textured soils as crop injury will likely occur.

To broaden the weed control spectrum, Fomesafen 2 SL Herbicide may be tank mixed with other preemergence herbicides such as Caparol®, Cotoran®, Direx®, Karmex®, Solicam®, or Staple®. For control of emerged weeds, Fomesafen 2 SL Herbicide may be tank mixed with a burndown herbicide such as Paraquat Concentrate or glyphosate brands (such as Touchdown®, Roundup®) labeled in cotton. In reduced tillage plantings, Fomesafen 2 SL Herbicide can be applied up to 14 days prior to planting or at planting with a burndown herbicide. Refer to the tank-mix partner label for use directions, restrictions and limitations. The most restrictive product labeling applies.

Cotton plants are tolerant to preemergence applications of Fomesafen 2 SL Herbicide when applied at recommended rates and to coarse textured soil types. Some crinkling or spotting of cotton foliage or stunting may occur, especially if heavy rainfall occurs during or soon after cotton emergence, but cotton plants normally outgrow these effects and develop normally.

Cotton foliage is not tolerant to Fomesafen 2 SL Herbicide. Do not apply Fomesafen 2 SL Herbicide over the top of emerged cotton as unacceptable cotton injury will occur.

Post-Directed Application

Apply Fomesafen 2 SL Herbicide in emerged cotton as a post-directed treatment using precision post-directed, hooded or shielded application equipment to provide complete coverage of emerged weeds. Apply Fomesafen 2 SL Herbicide at 1-1.5 pints per acre in a minimum of 10 gallons spray solution per acre. Applications may be made broadcast or banded. Post-directed applications of Fomesafen 2 SL Herbicide will provide contact control of labeled emerged weeds and residual preemergence control of labeled weeds (once activated by rainfall or irrigation). See previous label sections for a list of weeds controlled, recommended application rates, weed growth stages, and application directions.

Fomesafen 2 SL Herbicide should be applied with a non-ionic surfactant at 0.25 to 0.5% v/v, or crop oil concentrate at 1% v/v to emerged weeds. Do not add liquid nitrogen (28% or similar) to Fomesafen 2 SL Herbicide, or Fomesafen 2 SL Herbicide tank mixes in cotton.

To broaden the weed control spectrum, post-directed applications of Fomesafen 2 SL Herbicide may be tank mixed with other labeled post-directed herbicides such as Caparol, DSMA, Direx, Dual MAGNUM®, Envoke®, Karmex, Layby™ Pro, MSMA, Sequence®, or Suprend®. When applied with hooded or shielded sprayers, Fomesafen 2 SL Herbicide and Fomesafen 2 SL Herbicide tank mixes may be applied with burndown products such as Paraquat Concentrate, Sequence or glyphosate brands (such as Touchdown, Roundup) labeled for in crop application in cotton. Refer to the tank-mix partner label for use directions, restrictions and limitations. The most restrictive product labeling applies.

Cotton foliage is not tolerant to Fomesafen 2 SL Herbicide applications. Avoid contact to cotton foliage as unacceptable injury will occur. Application equipment should be calibrated (spray pressure, nozzle type and configuration, and orifice size) to avoid fine spray droplets contacting green cotton stems and foliage.

Post-Directed Application Timing in Cotton

Fomesafen 2 SL Herbicide may be applied to cotton at least 6 inches in height through layby as a post-directed application. All post-directed applications should avoid spray contact with any green non-barked parts of the cotton plant or foliage as unacceptable injury will occur. Follow the application timing recommendations below for post-directed applications in cotton.

Shield and Hooded Applications

Make a precision post-directed Fomesafen 2 SL Herbicide application to the base of the cotton plant avoiding contact with the cotton stem or foliage when cotton is at least 6 inches in height to avoid cotton injury. Use only hooded or shielded spray equipment to apply Fomesafen 2 SL Herbicide in cotton that is 6 inches to 12 inches in height. Adjust nozzles to provide full coverage of emerged target weeds.

Layby Applications

Make a post-directed Fomesafen 2 SL Herbicide application to the base of the cotton plant avoiding contact with any non-barked portion of the cotton plant or foliage. Use precision post-directed equipment or hooded or shielded sprayers on cotton that has developed a minimum of 4 inches of brown bark through layby. Application equipment should be configured to provide full coverage of emerged target weeds.

Product Use Restrictions - Cotton

Do not apply Fomesafen 2 SL Herbicide later than 70 days before harvest.

Do not apply more than 1.5 pints per acre of Fomesafen 2 SL Herbicide in any year.

Special Use Directions for the Suppression of Woollyleaf Bursage (Lakeweed), *Ambrosia grayi*, in Texas

Apply Fomesafen 2 SL Herbicide to cultivated areas of cropland in the fall or spring as a spot treatment at a rate of 1.5 pints per acre and incorporate to a depth of 2-3 inches for suppression of woollyleaf bursage. Applications should be made with ground equipment.

The use of adjuvants, as specified under the Spray Additives section, will significantly improve the initial burndown of any emerged woollyleaf bursage, but this effect is only temporary. Therefore, an adjuvant may be used if desired, but is not necessary.

Significant suppression may not be seen until 6-8 months after application, but should then continue for at least 2 years after application. Cotton or soybeans may be planted in treated areas. Under certain conditions, significant damage may occur to cotton planted within 18 months of application. A 3-year interval from last application to planting is required for all other crops.

Do not make more than one application of Fomesafen 2 SL Herbicide per year. Do not apply more than 1.5 pints per acre of Fomesafen 2 SL Herbicide in any year. If two consecutive year applications are made, allow a 2 year interval before another application.

DRY BEANS AND SNAP BEANS

Preplant Surface and Preemergence Application

Apply Fomesafen 2 SL Herbicide as a preplant surface or preemergence application in Regions 1, 2, 3, and 4 only for control or partial control of the weeds listed in Table 1. Fomesafen 2 SL Herbicide can be applied alone, or tank mixed or followed sequentially with other labeled dry bean or snap bean herbicides to broaden the weed control spectrum or control newly emerged weeds. Refer to the **Tank Mix and Sequential Application** section for additional information.

NOTE: Treated soil that is splashed onto newly emerged seedings may result in temporary crop injury but plants normally outgrow these effects and develop normally.

Postemergence Application

Apply Fomesafen 2 SL Herbicide as a postemergent broadcast application in Regions 1, 2, 3, 4

and 5 for control or partial control of the weeds listed in Table 2 and in the **Special Use Directions For Additional Weed Problems** section. Application rate depends on weed species and growth stage. Two applications may be made if necessary but not to exceed the maximum rate specified per geographic region. (Refer to map for definition of specified geographic regions). Refer to the Spray Additive section for recommended spray additives. Use of crop oil concentrate can improve weed control but may slightly reduce crop tolerance. Do not use UAN (28% or similar) or ammonium sulfate on dry beans or snap beans as severe crop injury may occur. Apply when dry beans or snap beans have at least one fully expanded trifoliate leaf.

Fomesafen 2 SL Herbicide can be applied alone or in tank mix with other labeled dry bean or snap bean postemergence herbicides to broaden the weed control spectrum. Refer to the **Tank Mix and Sequential Application** section.

Some bronzing, crinkling or spotting of dry bean or snap bean leaves may occur following postemergent applications, but dry beans and snap beans soon outgrow these effects and develop normally.

Tank Mix and Sequential Applications for Dry Beans and Snap Beans
Fomesafen 2 SL Herbicide can be used sequentially or in tank mix with the following products:

Dry Beans and Snap Beans	**Dry Beans Only**
Assure II®	Frontier®
Basagran®	Select®
Dual MAGNUM	Sonalan®
Eptam®	
Poast®	
Prowl®	
Pursuit®	
Raptor®	
Treflan®	

Under certain conditions, the mixture of Fomesafen 2 SL Herbicide with one or more of the above mentioned broadleaf herbicides may cause a reduction in activity of any postemergence grass herbicide in the mixture.

For sequential applications allow 2-3 days after the application of the postemergence grass herbicide before applying Fomesafen 2 SL Herbicide or Fomesafen 2 SL Herbicide mixtures. Where Fomesafen 2 SL Herbicide or the Fomesafen 2 SL Herbicide mixture is appliedfirst, apply the grass herbicide when the grass weeds begin to develop new leaves (generally around 7 days).

NOTE: Tank-mix applications can result in increased crop injury as compared to either product used alone.

Always read and follow the recommendations, restrictions and limitations for all products whether used alone, sequentially or in a tank mix. The most restrictive labeling of any product used applies.

Product Use Restrictions – Dry Beans and Snap Beans

- Refer to Fomesafen 2 SL Herbicide Regional Use Map for the maximum rate of Fomesafen 2 SL Herbicide (or other fomesafen containing products) that may be applied in each geographic region.

- Do not apply to any field in Regions 2, 3, 4 or 5 more than once every two years.
- **For snap beans:** Do not exceed 1.5 pints of Fomesafen 2 SL Herbicide per acre in any one year and also adhere to the maximum rate that may be applied in each geographic region (refer to the Fomesafen 2 SL Herbicide Regional Use Map). Do not graze treated areas or harvest for forage or hay. Do not utilize hay or straw for animal feed or bedding. Do not apply within 30 days of harvest.
- **For dry beans:** Do not exceed 1.5 pints of Fomesafen 2 SL Herbicide per acre in any one year and also adhere to the maximum rate that may be applied in each geographic region (refer to the Fomesafen 2 SL Herbicide Regional Use Map). Do not graze animals on green forage or stubble. Do not utilize hay or straw for animal feed or bedding. Do not apply within 45 days of harvest.

SOYBEANS Preplant Surface and Preemergence Application

Apply Fomesafen 2 SL Herbicide as a preplant surface or preemergence application in Regions 1, 2, 3, and 4 only for control or partial control of the weeds listed in Table 1. Fomesafen 2 SL Herbicide can be applied alone or tank mixed or followed sequentially with other labeled soybean herbicides to broaden the weed control spectrum or control newly emerged weeds. Refer to the **Tank Mix and Sequential Application** section for additional information.

For control of emerged weeds, Fomesafen 2 SL Herbicide may be tank mixed with a burndown herbicide such as Paraquat Concentrate or glyphosate brands (such as Touchdown or Roundup) labeled in soybeans. In reduced tillage plantings, Fomesafen 2 SL Herbicide can be applied up to 14 days prior to planting or at planting with a burndown herbicide.

Postemergence Application

Apply Fomesafen 2 SL Herbicide as a postemergence broadcast application in Regions 1, 2, 3, 4 and5 for control or partial control of weeds listed in Table 2 and in the **Special Use Directions For Additional Weed Problems** section. Application rate depends on weed species and growth stage. Refer to the Spray Additive section for recommended spray additives. To enhance postemergence control of susceptible broadleaf weeds (**soybeans only**) in Regions 2, 3, 4 and 5 (see Fomesafen 2 SL Herbicide Regional Use Map), Fomesafen 2 SL Herbicide can be used with a minimum of 2.5% liquid nitrogen (28% or similar) or a minimum of 10 pounds ammonium sulfate per 100 gallons of spray volume.
Fomesafen 2 SL Herbicide can be applied alone or in combination with other labeled soybean postemergence herbicides to broaden the weed control spectrum. Refer to the **Tank Mix and Sequential Application** section.

Some bronzing, crinkling or spotting of soybean leaves may occur following postemergent applications, but soybeans soon outgrow these effects and develop normally.

Tank Mix and Sequential Applications For Soybeans

Fomesafen 2 SL Herbicide can be used sequentially or in tank mix with one or more of the following products: Assure II, Basagran, Boundary®, Butyrac®, Classic®, Dual MAGNUM, Dual II MAGNUM®, FirstRate®, Fusilade® DX, Fusion®, Glyphosate (such as Touchdown, Roundup or Glyphomax™), Paraquat Concentrate, Harmony® GT XP, Pursuit, Poast, Poast Plus®, Prowl, Raptor, Resource®, Select®, Sequence, Scepter®, and Synchrony®STS®.

Under certain conditions, the mixture of Fomesafen 2 SL Herbicide with one or more of the above mentioned broadleaf herbicides may cause a reduction in activity of any postemergence grass herbicide in the mixture.

For sequential applications allow 2-3 days after the application of the postemergence grass herbicide before applying Fomesafen 2 SL Herbicide or Fomesafen 2 SL Herbicide mixtures. Where Fomesafen 2 SL Herbicide or the Fomesafen 2 SL Herbicide mixture is applied first, apply the postemergence grass herbicide when the grass weeds begin to develop new leaves (generally around 7 days).

NOTE:

- Tank-mix applications can result in increased crop injury as compared to either product used alone.
- Do not exceed 1 fl. oz. of Butyrac per acre in mixture with Fomesafen 2 SL Herbicide.
- Do not exceed 0.25 oz./A of Synchrony STS herbicide in the tank with labeled rates of Fomesafen 2 SL Herbicide on non-STS varieties. This tank mix can be applied postemergence to any soybean variety for additional broadleaf weed control. Refer to the Synchrony STS label for more information and crop rotation restrictions.
- Always read and follow the recommendations, restrictions and limitations for all products whether used alone, sequentially or in a tank mix. The most restrictive labeling of any product used applies.

Roundup Ready® (Glyphosate Tolerant) Soybean Tank Mixes

Fomesafen 2 SL Herbicide at 6-12 oz./A, can be tank mixed with glyphosate products (such as Touchdown or Roundup) that are labeled for Roundup Ready (glyphosate tolerant) soybeans for improved postemergence control of many weeds such as morningglory spp., hemp sesbania, waterhemp, and black nightshade which are known to have tolerance to glyphosate, but are susceptible to Fomesafen 2 SL Herbicide.

FOLLOW THE RECOMMENDATIONS ON THE GLYPHOSATE PRODUCT LABEL FOR THE USE OF SPRAY ADDITIVES IN THIS TANK MIX.

Do not allow this tank mix to move off target as contact by even minute quantities can cause severe damage or death to any nontarget vegetation.

NOTE: Postemergence application of this tank mix on soybean varieties which do not contain the Roundup Ready gene will result in severe crop injury or death of the soybean crop. Always read and follow the recommendations, restrictions and limitations for all products used. The most restrictive labeling of any product applies.

General Restrictions – Soybeans

- Refer to Fomesafen 2 SL Herbicide Regional Use Map for the maximum rate of Fomesafen 2 SL Herbicide (or other fomesafen containing products) that may be applied in each geographic region. Do not apply to any field in Regions 2, 3, 4 or 5 more than once every two years.
- Do not exceed 1.5 pints of Fomesafen 2 SL Herbicide per acre in any one year and also adhere to the maximum rate that may be applied in each geographic region (refer to the Fomesafen 2 SL Herbicide Regional Use Map). Do not graze treated areas or harvest for forage or hay. Do not apply within 45 days of harvest.

AERIAL SPRAY DRIFT MANAGEMENT ADVISORY

SPRAY DRIFT MANAGEMENT

AVOIDINGSPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR. The interaction of many equipment and weather related factors determines the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

1. 1. The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
2. 2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they should be observed.

The applicator should be familiar with and take into account the information covered in the **Aerial Drift Reduction Advisory Information.**

Aerial Drift Reduction Advisory Information IMPORTANCE OF DROPLET SIZE

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (See **Wind, Temperature and Humidity,** and **Temperature Inversion** sections of this label).

CONTROLLING DROPLET SIZE

- **Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** - Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of nozzles** -Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation** -Orienting nozzles so that the spray is released backwards, parallel to the airstream will produce larger droplets than other orientations. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type** - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce larger droplets than other nozzle types.

BOOM LENGTH

For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

APPLICATION HEIGHT

Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

SWATH ADJUSTMENT
When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller drops, etc.).

WIND
Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. **NOTE:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

TEMPERATURE AND HUMIDITY
When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

TEMPERATURE INVERSIONS
Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

SENSITIVE AREAS
The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, nontarget crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

APPENDIX

COMMON NAME	SCIENTIFIC NAME
Amaranth, Palmer	*Amaranthus palmeri*
Amaranth, spiny	*Amaranthus spinosus*
Anoda, spurred	*Adoda cristata*
Balloonvine	*Cardiospermum halicacabum*
Barnyardgrass	*Echinochloa crus-galli*
Bindweed, field	*Convolvulus arvensis*
Bindweed, hedge	*Calystegia sepium*
Broadleaf signalgrass	*Bracharia platyphylia*
Carpetweed	*Mullugo verticillata*
Citron (wild watermelon)	*Citrullus vulgaris*
Cocklebur, common	*Xanthium strumarium*
Copperleaf, hophornbeam	*Acalypha ostryifolia*
Copperleaf, Virginia	*Svs;ufjs bothomovs*
Crabgrass	*Digitaria* spp.
Crotalaria, showy	*Crotolaria spectabilis*
Croton, tropic	*Croton glandulosus*
Cucumber, volunteer	*Cucumis sativas*
Eclipta	*Eclipta prostrate*
Foxtail, giant	*Setaria faberi*
Foxtail, green	*Setaria virdis*
Foxtail, yellow	*Setaria glauca*
Goosegrass	*Eleusine indica*
Groundcherry, cutleaf	*Physalis angulata*
Hemp	*Cannabis sativa*
Horsenettle	*Solanum carolinense*
Jimsonweed	*Datura stramonium*
Johnsongrass, seedling	*Sorghum halapense*
Ladysthumb	*Polygonum persicaria*
Lambsquarters, common	*Chenopodium album*
Mexicanweed	*Caperonia castanifolia*
Milkweed, climbing	*Sarcostemma cyanchoides*
Milkweed, honeyvine	*Ampelamus albidus*
Morningglory:	
Cypressvine	*Ipomoea quamoclit*
Entireleaf var.	*Ipomoea hederacea* var. *integriuscula*
Ivyleaf	*Ipomoea hederacea*
Purple moonflower	*Ipomoea turbinate*
Red (scarlet)	*Ipomoea coccinea*
Smallflower	*Jacquemontia tamnifolia*
Pitted (smallwhite)	*Ipomoea lacunose*
Tall (common)	*Impmoea purpurea*
Palmleaf (willowleaf)	*Impmoea wrightii*
Mustard, wild	*Sinapis arvensis*

COMMON NAME	SCIENTIFIC NAME
Nightshade, black	*Solanum nigrum*
Nightshade, Eastern black	*Solanum ptychanthum*
Nightshade, hairy	*Solanum physalifolium*
Nutsedge, yellow	*Cyperus esculentus*
Panicum, fall	*Panicum dichotomiflorum*
Panicum, Texas	*Panicum texanum*
Pigweed:	
Amaranth, Palmer	*Amaranthus palmeri*
Amaranth, spiny	
Redroot	*Amaranthus retroflexus*
Smooth	*Amaranthus hybridus*
Poinsettia, wild	*Euphorbia heterophylla*
Purslane, common	*Portulaca oleracea*
Pusley, Florida	*Richardia scabra*
Ragweed, common	*Ambrosia artemisifolia*
Ragweed, Giant	*Ambrosia trifida*
Redweed	*Melchia corchorifolia*
Sesbania, hemp	*Sesbania exaltata*
Sicklepod	*Senna obtusifolia*
Sida, prickly	*Sida spinosa*
Signalgrass, broadleaf	*Bracharia platyphylia*
Smartweed, Pennsylvania	*Polygonum pennsylvanicum*
Smellmelon	*Cucumis melo*
Spurge, prostrate	*Chamaesyce humistrata*
Spurge, spotted	*Chamaesyce maculate*
Starbur, bristly	*Acanthospermum hispidum*
Sunflower, common	*Helianthus annuus*
Trumpetcreeper	*Campis redicans*
Velvetleaf	*Abutilon theophrasti*
Venice mallow	*Hibiscus trionum*
Waterhemp, common	*Amaranthus rudis*
Waterhemp, tall	*Amaranthus tuberculatos*
Witchweed	*Striga asiatica*
Yellow rocket	*Barbarea vulgaris*

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

Prohibitions
Open dumping is prohibited. Do not reuse empty container.

Pesticide Storage
Store above 32°F in original containers only. If product freezes, return to room temperature and agitate to reconstitute. Keep container closed when not in use. Do not store near food or feed. In case of spill or leak on floor or paved surfaces, soak up with sand, earth or synthetic absorbent. Remove to chemical waste area.

Pesticide Disposal
Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

Container Handling
Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ORION FOMES LLC MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Orion Fomes LLC is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein.

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Print Form

Please read instructions on reverse before compleung form. Form Approvod. MB No. 2070-0060. Approval exples 2-28-

United States
Environmental Protection Agency
Washington, DC 20460

- [ ] Registration
- [ ] Amendment
- [x] Other

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number	2. EPA Product Manager	3. Proposed Classification
87655-2	K. Montague	[ ] None [x] Restricted
4. Company/Product (Name)	**PM#**	
Fomesafen 2 SL Herbicide	23	

5. Name and Address of Applicant *(Include ZIP Code)*

Orion Fomes, LLC
P. O. Box 21720
Mesa, AZ 85277

[x] *Check if this is a new address*

6. Expedited Reveiw. In accordance with FIFRA Section 3(c)(3)(b)(i), my product is similar or identical in composition and labeling to:

EPA Reg. No. _____

Product Name _____

Section - II

- [ ] Amendment - Explain below.
- [ ] Resubmission in response to Agency letter dated _____
- [ ] Notification - Explain below.
- [x] Final printed labels in repsonse to Agency letter dated June 27, 2011
- [ ] "Me Too" Application.
- [ ] Other - Explain below.

Explanation: Use additional page(s) if necessery. (For section I and Section II.)

Submission of final label.

Section - III

1. Meterial This Product Will Be Packaged In:

Child-Resistant Packaging	Unit Packaging	Water Soluble Packeging	2. Type of Container
[ ] Yes [x] No	[ ] Yes [x] No	[ ] Yes [ ] No	[ ] Metal [x] Plastic [ ] Glass [ ] Paper [ ] Other (Specify)
***Certification must be submitted**	If "Yes" Unit Packaging wgt. / No. per container	If "Yes" Package wgt / No. per container	

3. Location of Net Contents Information	4. Size(s) Retail Container	5. Location of Label Directions
[x] Label [ ] Container	2.5 gal	[ ] On Label [x] On Labeling accompaning product

6. Menner in Which Label is Affixed to Product [ ] Lithograph [ ] Psper glued [ ] Stencilad [x] Other plastic sleeve

Section - IV

1. Contact Point *(Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)*

Name	Title	Telephone No. (Include Area Code)
Robert Hawk	Agent	928-342-3489

Certification

I certify that the statements I have made on this form and all attachments thereto are true, accurate end complete. I acknowledge that any knowlingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

6. Date Application Received **(Stamped)**

2. Signature	3. Title
Robert Hawk	Agent
4. Typed Name	**5. Data**
Robert Hawk	10/10/2011

EPA Form 8570-1 (Rev. 3-94) Previous editions are obsolete. White - EPA File Copy (originell) Yellow - Applicant C

CORRECTION to June 27, 2011 Notice of Registration

EPA REG. NO. 87655-3

Note to: File

Re: CORRECTING NOTICE OF REGISTRATION FOR NEW PRODUCT
Product Name: Fomesafen 2 SL Herbicide
Active Ingredients: Fomesafen at 22.8%
EPA Registration Number: 87655-2 (-E)
Original Submission Dates: June 30, 2011
Decision Number: 441198

In a recent action where this Orion Fomes product was cited, two errors in the original Notice of Registration for this product was apparent. The error, though minor, should be corrected to assure the most accurate product labels are available to our State program partners and the general public on the Pesticide Product Label System (PPLS).

Unconditional Registration

The first line in the Notice of Registration that reads "This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A)..." is not correct. This is an unconditional registration and this text should read "This product is unconditionally registered in accordance with FIFRA sec. 3(c)(5)....."

First Aid Box Text

The error in the First Aid box is only on the Notice of Registration.

The First Aid text in the final printed label submitted on October 10, 2011 is accurate and acceptable.

This revised Notice of Registration bears the same June 27, 2011 date as the original Notice of Registration, and should be uploaded to PPLS.

Attached please also find a brief cover letter to accompany the revised Notice of Registration explaining the error and the steps we are taking to assure PPLS is updated with the correct documents bearing the correct First Aid box language.

Reviewer: Michael Walsh, RD/Herbicide Branch, Tel: 308-2972

October 10, 2010

Document Processing
Desk Office of Pesticide Programs (P7504C)
Environmental Protection Agency
Room S-4900, One Potomac Yard (South Building)
2777 S. Crystal Drive
Arlington, VA 22202

Attn: Kathryn Montague (PM 23), Registration Division

Dear Ms. Montague:

Subject: Fomesafen 2 SL Herbicide (87655-2): Final Label

Thank you for your June 27, 2011 Notice of Pesticide Registration for this product. Orion Fomes, LLC submits here Form 8570-1 and one copy of the final label.

Sincerely,

Robert Hawk
Source Dynamics LLC
Agent for Orion Fomes, LLC

P.O. Box 27716, Mesa, Arizona 85274 tel 480-218-4289

	ENVIRONMENTAL PROTECTION AGENCY **Office of Pesticide Programs** **Registration Division (7505P)** **Ariel Rios Building** **1200 Pennsylvania Ave., NW** **Washington, D.C. 20460**	**EPA Reg.Number:** 87655-2	**Date of Issuance:** JUN 27 2011
	NOTICE OF PESTICIDE: _X_ Registration __ Reregistration (under FIFRA, as amended)	**Term of Issuance:** Unconditional	
		Name of Pesticide Product: Fomesafen 2 SL Herbicide	

Name and Address of Registrant (include ZIP Code):

Orion Fomes, LLC
P.O. Box 21720
Mesa, AZ 85277

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA sec. 3(c)(5) provided that you:

1) Submit and/or cite all data required for registration/reregistration review of your product when the Agency requires all registrants of similar products to submit data. If required, failure to submit acceptable data to fulfill these requirements may result in registration cancellation in accordance with FIFRA section 6(e).

2) Add the phrase "EPA Reg. No. 87655-2" to the labeling and assure that the EPA Establishment Number and Net Contents are also on the label.

3) Generate one-year storage stability (830.6317) and corrosion characteristics (830.6320) data on the product. The observations should be made at 0, 1, 3, 6, 9, and 12 month intervals. The results must be submitted to the Agency in electronic and hard copy format within 15 months of the date on this notice.

4) The statements appearing in the First Aid box must be reordered as follows:

IF IN EYES.....
IF ON SKIN.....
IF SWALLOWED.....
IF INHALED.....

SEE NEXT PAGE FOR ADDITIONAL COMMENTS

Signature of Approving Official: Kathryn V. Montague Product Manager 23 Herbicide Branch Registration Division (7505P)	Date: JUN 27 2011

5) The NOTE TO PHYSICIAN in the FIRST AID box on page 1 must be expanded to address the category I Primary Eye Irritant toxicity. The following statements are suggested types of information that may be included, if applicable:

- technical information on symptomology;
- use of supportive treatments to maintain life functions;
- medicine that will counteract the specific physiological effects of the pesticide;
- company telephone number to specific medical personnel who can provide specialized medical advice.

6) In the PERSONAL PROTECTIVE EQUIPMENT (PPE) box on page 2, the protective eyewear requirement must be changed to read "Protective eyewear (goggles, face shield, or safety glasses)."

7) Add an additional bullet to the USER SAFETY RECOMMENDATIONS box at the bottom of page 2. The last bullet should read "Remove and wash contaminated clothing before reuse."

8) A header must be added to the groundwater advisory language appearing near the top of page 3.

"GROUNDWATER ADVISORY

"This chemical is known to leach through soil into groundwater under certain conditions....".

9) Replace the header near the bottom of page 3 that reads "GENERAL INFORMATION" with "PRODUCT INFORMATION".

10) Replace the header near the bottom of page 6 that reads "GENERAL PRECAUTIONS" with "RESTRICTIONS AND PRECAUTIONS".

11) Remove the bolded term "U.S. Label" that appears near the middle of page 16.

12) Replace the header on page 17 that reads "General Restrictions – Cotton" with "Product Use Restrictions – Cotton".

13) Replace the header "General Restrictions – Dry Beans and Snap Beans" appearing near the bottom of page 18 with "Product Use Restrictions – Dry Beans and Snap Beans".

14) NOTE: While no additional data is being requested at this time, marketing claims made on the pesticide label must be substantiated by data maintained in your files. If data supporting marketing claims made on the product label is not available then those claims must be removed.

15) NOTE: Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA

SEE NEXT PAGE

section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

16) Submit one (1) copy of the revised final printed label before the product is released for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

draft Orion Fomes label Sept. 16, 2010

FOMESAFEN 2 SL HERBICIDE

For control of certain weeds in cotton, dry beans, snap beans and soybeans

GROUP 14 HERBICIDE

ACTIVE INGREDIENT

Sodium salt of
fomesafen [5-[2-chloro-4-trifluoromethyl)phenoxy]-*N*-(methylsulfonyl)-2-nitrobenzamide].....22.8%

OTHER INGREDIENTS:.....77.2%

TOTAL..... 100.0%

Contains 1,2-benzisothiazolin-3-one at 0.02% as a preservative

Equivalent to 21.7% fomesafen or 2 pounds per gallon fomesafen

KEEP OUT OF REACH OF CHILDREN

DANGER/PELIGRO

Si usted no entiende la etiqueta, busque al alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

See Additional Precautionary Statements and Directions for Use on label.

FIRST AID

IF IN EYES	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
IF SWALLOWED	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
IF INHALED	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.

For MEDICAL Emergencies 24 Hours a Day Call a Poison Control Center at 1-800-222-1222.
For CHEMICAL Emergency Assistance (Spill, Fire or Aceident) Call ChemTrec at 1-800-424-9300
Have the product container or label with you when calling a Poison Control Center or doctor or going for treatment.

NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric lavage.

Orion Fomes, LLC
P.O. Box 21720
Mesa, AZ 85277
Tel. 480-218-4289

ACCEPTED
with COMMENTS
In EPA Letter Dated:

Under the Federal I[illegible]icide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.

87655-2

EPA Reg. No. 87655-x
EPA Est. No.
Net Contents: 2.5 gal

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER

CORROSIVE. CAUSES IRREVERSIBLE EYE DAMAGE. DUE TO CORROSIVE NATURE, MAY BE HARMFUL OR FATAL IF SWALLOWED. HARMFUL IF INHALED OR ABSORBED THROUGH SKIN. Do not get in eyes, on skin or on clothing. Avoid breathing vapors or spray mist.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as barrier laminate or Viton
- Shoes plus socks
- Protective eyewear

In addition, for aerial applications mixers and loaders handling more than 140 gallons of Fomesafen 2 SL Herbicide in any single workday must wear:

- Dust/mist filtering NIOSH-approved respirator with any N, R. P or HE filter.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instruction for washables exists, use detergent and hot water. Keep and wash PPE separately from other laundry.

When handlers use closed systems, enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)]. The handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash-waters. Do not apply when weather conditions favor drift from target area.

This chemical is known to leach through soil into groundwater under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.

PPE required for early entry into treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated such as plants, soil, or water, is:

- Coveralls
- Chemical-resistant gloves such as barrier laminate or Viton.
- Shoes plus socks
- Protective eyewear

GENERAL INFORMATION

Read all label directions before using.

Fomesafen 2 SL Herbicide is a selective herbicide which may be applied preplant surface, preemergence and/or postemergence for control or partial control of broadleaf weeds, grasses and sedges in cotton, dry beans, snap beans and soybeans.

Preplant Surface and Preemergence Applications

Certain germinating broadleaf weeds, grasses and sedges can be controlled or partially controlled by soil residual activity from either preplant surface or preemergence applications of Fomesafen 2 SL Herbicide. Moisture is necessary to activate Fomesafen 2 SL Herbicide in soil for residual

weed control. Dry weather following applications of Fomesafen 2 SL Herbicide may reduce effectiveness. When adequate moisture is not received after a Fomesafen 2 SL Herbicide application, weed control may be improved by overhead irrigation with at least a 1/4 inch of water.

Postemergence Applications

Fomesafen 2 SL Herbicide is generally most effective when used postemergence, working through contact action. Therefore, emerged weeds must have thorough spray coverage for effective control. Best broad-spectrum postemergence control of susceptible broadleaf weeds is obtained when Fomesafen 2 SL Herbicide is applied early to actively growing weeds. This usually occurs within 14 to 28 days after planting. Refer to the weed control tables for specific recommendations on weed growth stages and rates.

Some bronzing, crinkling or spotting of labeled crop leaves may occur following postemergence applications, but labeled crops soon outgrow these effects and develop normally.

Soil Characteristics

Application of Fomesafen 2 SL Herbicide to soils with high organic matter and/or high clay content may require higher rates than soils with low organic matter and/or low clay content. Refer to the Fomesafen 2 SL Herbicide Regional Use Map, weed control tables, and specific crop use sections for recommendations on use rates based on soil texture.

Environmental and Agronomic Conditions

Always apply Fomesafen 2 SL Herbicide under favorable environmental conditions that promote active weed growth. Avoid applying Fomesafen 2 SL Herbicide to weeds or labeled crops which are under stress from drought, extreme temperatures, excessive water, low humidity, low soil fertility, mechanical or chemical injury as reduced weed control and/or increased crop injury may result.

Rainfastness

Fomesafen 2 SL Herbicide requires a 1 hour rain-free period for best results when applied postemergence.

Cultivation

Cultivation prior to postemergence application is not recommended. Cultivation may put weeds under stress, reducing weed control. Timely cultivation 1-3 weeks after applying Fomesafen 2 SL Herbicide may assist weed control.

Information on Weed Resistance

Naturally occurring biotypes of certain broadleaf species with resistance to this herbicide and related products (same mode of action) are known to exist. Selection of resistant biotypes, through repeated use of these herbicides, may result in control failures.

If poor performance cannot be attributed to adverse weather conditions or improper application methods, a resistant biotype may be present. In such a case, additional treatments with this herbicide or similar mode of action products are not recommended. Consult your local company representative or agricultural advisor for assistance.

APPLICATION DIRECTIONS

Drift Management

Avoiding spray drift at the application site is the responsibility of the applicator and the grower. The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator and grower must consider the interaction of equipment and weather-related factors to ensure that the potential for drift to sensitive nontarget plants is minimal.

This pesticide may only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, nontarget plants) is minimal (i.e., when the wind is blowing away from the sensitive area).

Spray Additives

Only spray additives cleared for use on growing crops under 40 CFR 180.1001 may be used in spray mixture.

For Postemergence Applications Always Add One Of The Following Except in Tank Mix With Products Prohibiting Spray Additives:

Nonionic Surfactant (NIS) -Use NIS containing at least 75% surface active agent at 0.25 to 0.5% v/v (1-2 qts./100 gals.) of the finished spray volume.

Crop Oil Concentrate (COC) - Use a nonphytotoxic COC containing 15-20% approved emulsifier, at 0.5-1% v/v (0.5-1 gal./100 gals.) of the finished spray volume. COC can improve weed control but may slightly reduce crop tolerance.

Other Adjuvants -Adjuvants other than COC or NIS may be used providing the product meets the following criteria:

1. Contains only EPA exempt ingredients.
2. Is nonphytotoxic to the target crop.
3. Is compatible in mixture. (May be established through a jar test.)
4. Is supported locally for use with Fomesafen 2 SL Herbicide on the target crop through proven field trials and through university and extension recommendations.

Note: No adjuvants are needed for preplant surface or preemergence applications unless Fomesafen 2 SL Herbicide is being used in a burndown on emerged weeds.

Recommended Mixing Order:

1. Fill the spray tank with half the required amount of water and begin agitation.*
2. Add dry pesticide formulations.
3. Add Fomesafen 2 SL Herbicide Herbicide.
4. Add liquid pesticide formulations.
5. Add spray adjuvant and fertilizer (if used).
6. Add the remaining water and maintain agitation throughout the spray operation.

*Compatibility agent, 1 gallon/500 gallons of water or 0.2% v/v, may be added as needed.

GROUND APPLICATION Preplant Surface and Preemergence Application -Use a minimum of 10 gallons per acre. Nozzle selection should meet manufacturer's gallonage and pressure recommendations for preplant surface or preemergence applications.

Postemergence Application -Use sufficient spray volume and pressure to ensure complete coverage of the target weed. A spray volume of 10-20 gallons per acre and 30-60 psi at the nozzle tip is recommended. On large weeds and/or dense foliage, use 60 psi and a minimum of 20 gallons per acre to ensure coverage of weed foliage.

The use of flat fan nozzles will result in the most effective post-emergence application of

Fomesafen 2 SL Herbicide. Use nozzles that are set up to deliver medium quality spray (ASAE StandardS-572).

DO NOT USE FLOOD TYPE OR OTHER SPRAY NOZZLES, WHICH DELIVER COARSE, LARGE DROPLET SPRAYS.

BAND APPLICATIONS

Calculate the amount of herbicide and water volume needed for band treatment by the following formulas:

band width in inches / row width in inches	X	broadcast rate per acre	=	band herbicide rate per acre
band width in inches / row width in inches	X	broadcast volume per acre	=	band water volume per acre

Note: Thorough weed coverage is important for postemergence band applications. Best coverage is obtained with a minimum of two nozzles, one directed to each side of the planted row. Application with a single nozzle directed over the top of the row is not recommended for postemergence applications but is suitable for preemergence applications. Cultivation of untreated areas may be needed following band applications. When making postemergence band applications and cultivating in the same operation, position nozzles in advance of the cultivation device. This will reduce dust in the spray area. Dust can intercept spray, reducing weed coverage resulting in less than adequate weed control.

AERIAL APPLICATION

Use sufficient spray volume and pressure to ensure complete coverage of the target. A minimum of 5 gallons per acre of spray mixture should be applied with a maximum of 40 PSI pressure. When foliage is dense, use a minimum of 10 gallons per acre to ensure coverage of weed foliage.

DO NOT APPLY THIS PRODUCT THROUGH ANY TYPE OF IRRIGATION SYSTEM.

GENERAL PRECAUTIONS

- A maximum of 1.5 pts. of Fomesafen 2 SL Herbicide **(or a maximum of 0.375 lb. a.i./A of fomesafen from any product containing fomesafen)** may be applied per acre per year in Region 1 (see Regional Use Map).
- A maximum of 1.5 pts. of Fomesafen 2 SL Herbicide **(or a maximum of 0.375 lb. a.i./A of fomesafen from any product containing fomesafen)** may be applied per acre in ALTERNATE years in Region 2 (see Regional Use Map).
- A maximum of 1.25 pts. of Fomesafen 2 SL Herbicide **(or a maximum of 0.313 lb. a.i./A of fomesafen from any product containing fomesafen)** may be applied per acre in ALTERNATE years in Region 3 (see Regional Use Map).
- A maximum of 1 pt. of Fomesafen 2 SL Herbicide **(or a maximum of 0.25 lb. a.i./A of fomesafen from any product containing fomesafen) may** be applied per acre in ALTERNATE years in Region 4 (see Regional Use Map).
- A maximum of 0.75 pt. of Fomesafen 2 SL Herbicide (**or a maximum of 0.1875 lb. a.i./A**

of fomesafen from any product containing fomesafen) may be applied per acre in ALTERNATE years in Region 5 (see Regional Use Map).

- Thoroughly clean the spray system with water and a commercial tank cleaner before and after each use.
- Tank mixes of Fomesafen 2 SL Herbicide with other pesticides, fertilizers or any other additives except as specified on this label or other approved Source Dynamics supplemental labels may result in tank-mix incompatibility, unsatisfactory performance or unsatisfactory crop injury.
- Avoid overlapping spray swaths, as injury may occur to rotational crops.
- To provide adequate coverage, it is recommended that groundspeed not exceed 10 mph during application.
- Avoid drift to all other crops and nontarget areas. Crops other than those labeled may be severely injured by drift. Do not apply when wind velocity exceeds 15 mph.
- Do not make ground or aerial application during temperature inversions.

Replanting

If replanting is necessary in fields previously treated with Fomesafen 2 SL Herbicide, the field may be replanted to cotton, dry beans, snap beans or soybeans. During replanting, a minimum of tillage is recommended to preserve the herbicide barrier for effective weed control. Do not apply a second application of Fomesafen 2 SL Herbicide or other fomesafen containing product as crop injury or illegal residues may occur in harvested crops. If tank-mix combinations were used, refer to product labels for any additional replanting instructions.

ROTATIONAL CROP RESTRICTIONS

The following rotational crops may be planted after applying Fomesafen 2 SL Herbicide at recommended rates:

Crop to be Planted	**Minimum Rotation Interval (Months After Last Fomesafen Application)**
Cotton, dry beans, snap beans and soybeans	0
Small grains such as wheat barley and rye	4
Corn*, peanuts, peas, rice and seed corn	10
To avoid crop injury do not plant alfalfa, sunflowers, sugar beets, sorghum** or any other crop within	18

Do not graze rotated small grain crops or harvest forage or straw for livestock.

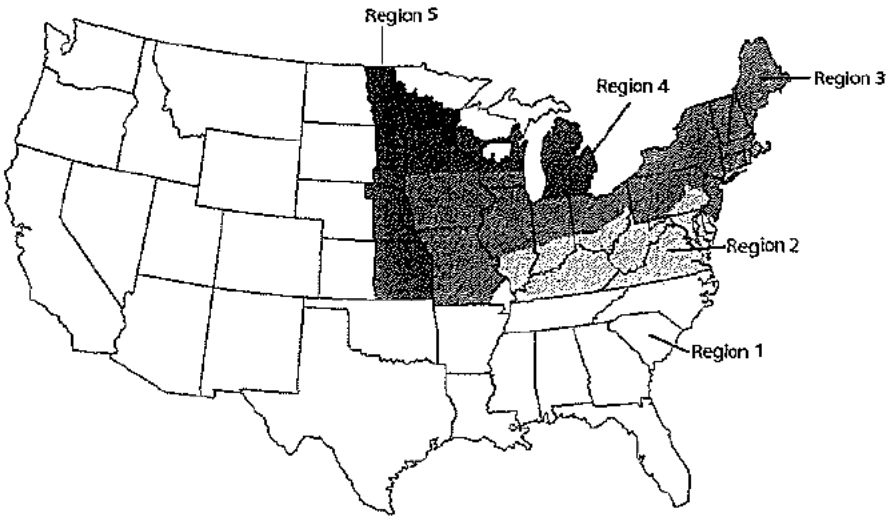
*Use a 12 month minimum rotation interval for popcorn in the states of Ohio, Kentucky, Illinois, Indiana, Iowa, and Region 4 when applied at rates of 1.0 pint per acre or more.

*Use 18 month minimum rotation interval for sweet corn in the states of Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, Vermont and Region 5.

**Sorghum may be planted back after 10 months in Region 1.

USE RATES AND WEEDS CONTROLLED

FOMESAFEN 2 SL REGIONAL USE MAP



REGION 1(Maximum Rate 1.5 pts./A per year)

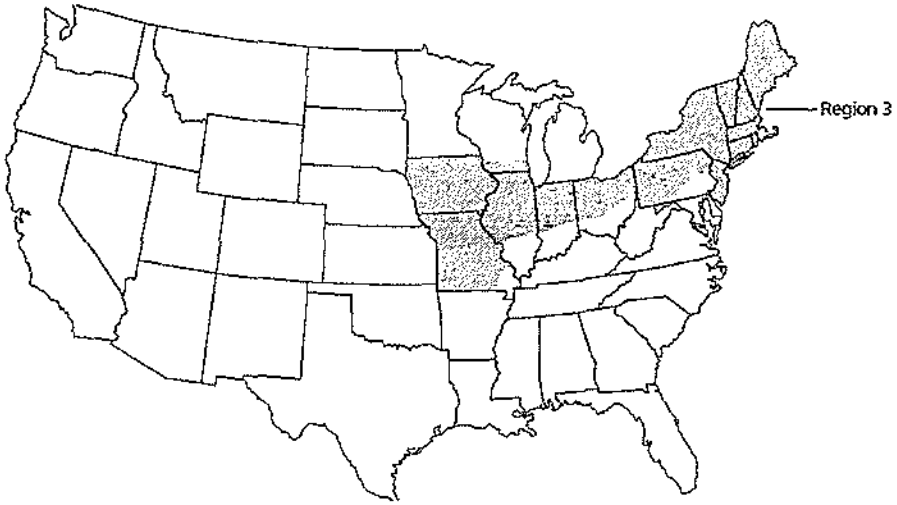
REGION 1-Includes the following states or portion of states where Fomesafen 2 SL Herbicide may be applied: Alabama, Arkansas, Georgia, Louisiana, Mississippi, Missouri (counties of Bollinger, Butler, Cape Giradeau, Dunklin, Madison, Mississippi, New Madrid, Pemiscot, Perry, Ripley, Scott, Stoddard and Wayne), North Carolina, Oklahoma (East of U.S. Highway 75 and East of Indian Nation Parkway), South Carolina, Tennessee, and Texas

(includes area East of U.S. Highway 77 to State Road 239 including all of Calhoun County).

REGION 2 (Maximum Rate 1.5 pts./A, alternate years)

REGION 2 -Includes the following states or portion of states where Fomesafen 2 SL Herbicide may be applied: Delaware, Kentucky, Maryland, Virginia, West Virginia, South of Interstate 70 in the following states: Illinois, Indiana and Ohio and all areas South of Interstate 80 to the intersection of U.S. Highway 15 and East of U.S. Highway 15 and U.S. Highway 522 in Pennsylvania.

REGION 3 (Maximum Rate 1.25 pts./A, alternate years)



REGION 3 -Includes the following states or portion of states where Fomesafen 2 SL Herbicide may be applied: Connecticut, Iowa, Maine, Massachusetts, Missouri (all counties except for those listed in Region 1), New Hampshire, New Jersey, New York, Pennsylvania (all areas except those listed in Region 2), Rhode Island, Vermont and Wisconsin (South of U.S. Highway 18 between Prairie Du Chien and Madison, and South of Interstate 94 between Madison and Milwaukee),

andNorth of Interstate 70 in following states: Indiana, Illinois and Ohio.

REGION 4 (Maximum Rate 1 pint per acre, alternate years)

REGION 4 -Includes the following states or portion of states where Fomesafen 2 SL Herbicide may be applied: Kansas (all counties East of or intersected by U.S. Highway 281), Michigan (Southern Peninsula), Minnesota (all areas South of Interstate 94), Nebraska (all counties East of or intersected by U.S. Highway 281), and Wisconsin (all areas, except those in Region 3, South of Interstate 94 from Minnesota state line to Eau Claire and South of U.S. Highway 29 from Eau Claire to Green Bay plus Barron, Chippewa, Clark, Door, Dunn, Eau Claire, Kewaunee, Marathon, Menominee, Oconto, Polk, Shawano, and St. Croix counties. The following counties are excluded: Adams, Marquette, Portage, Waupaca, Waushara and Wood). North Dakota (all areas East of Interstate 29 from Fargo South to the South Dakota state line). South Dakota (all areas East of Interstate 29 from the North Dakota state line to Watertown, all areas East of Highway 81 from Watertown to Madison and all areas East and South of State Road 34 and U.S. Highway 281 to the Nebraska state line).

REGION 5 (Maximum Rate 0.75 pint per acre, alternate years)

REGION 5 -Includes the following states or portion of states where Fomesafen 2 SL Herbicide may be applied: North Dakota (all areas East of U.S. Highway 281 except those areas in Region 4), South Dakota (all areas East of U.S. Highway 281 except those areas in Region 4) and Minnesota (all areas South of U.S. Highway 2 except those areas in Region 4).

WEEDS CONTROLLED

Table 1: Weeds controlled or partially controlled* by preemergence activity of Fomesafen 2 SL at 1 to 1.5 pints per acre**

Broadleaf Weeds Controlled	Soil Texture	Organic Matter
Amaranth, Palmer	All soil types	Up to 0.5%
Croton, tropic***		
Eclipta		
Galinsoga spp.		
Lambsquarters, common		
Morningglory, smallflower		
Nightshade, black		
Nightshade, Eastern black		
Pigweed, redroot		
Pigweed, smooth		
Poinsettia, wild		
Purslane, common		
Ragweed, common***		
Sida, prickly***		
Starbur, bristly		
Broadleaf Weeds Partially Controlled*		
Anoda, spurred		
Cocklebur, common		
Morningglory, entireleaf		
Morninglory, ivyleaf		
Morningglory, pitted		
Morningglory, red/scarlet		
Morningglory, tall		
Nightshade, hairy		
Ragweed, giant		
Waterhemp, common		
Sedges Partially Controlled*		
Nutsedge, yellow		

*Partial control means significant activity but not always at a level considered acceptable for commercial weed control.
**Use the higher endof the rate range when heavy weedpopulations are anticipated.
***Rates less than 1.5 pts/A will provide only partial control of this weed.

Table 2: Weeds Controlled or Partially Controlled* by Postemergence Activity of Fomesafen 2 SL Herbicide

Weed	Fomesafen 2L Rate (pints per acre) Maximum Growth Stage Controlled At			
	0.75 pt/A No. of True Leaves	1 pt/A No. of True Leaves	1.25 pt/A No. of True Leaves	1.5 pt/A No. of True Leaves
Anoda, spurred	--	--	--	2
Balloonvine	--	--	2[c]	2
Carpetweed	--	6" diameter size	multi-leaf 6" diameter	unlimited size
Citron (wild watermelon)	--	2	2	4
Cocklebur, common[a,b]	--	--	2	4
Copperleaf, hophornbeam	--	2	2	4
Copperleaf, Virginia	--	2	2	4
Crotalaria, showy	--	4	4	6
Croton, tropic	--	2	2	4
Cucumber, volunteer	--	4	4	6
Eclipta	--	2	2	4
Groundcherry, cutleaf	--	4	4	6
Hemp[b]	--	--	4	6
Horsenettle[b]	--	2[c]	3[c]	4[c]
Jimsonweed	2	4	6	8
Ladysthumb	--	2	2	4
Lambsquarters, common[c]	--	2	2	2
Mexicanweed	--	2[c]	2[c]	2
Morningglory:				
Cypressvine	--	4	4	6
Entireleaf var.	2[c]	2	2	4
Ivyleaf	2[c]	2	2	4
Purple moonflower	--	2	4	4
Red (scarlet)	--	2	2	4
Smallflower	--	2	2	4
Pitted (smallwhite)	--	4	4	4
Tall (common)	2[c]	2	2	3
Palmleaf (willowleaf)	--	2	2	4
Mustard, wild	2	4	6	8
Nightshade, black	2	4	4	4

Table 2 (continued): Weeds Controlled or Partially Controlled* by Postemergence Activity of Fomesafen 2 SL Herbicide

Weed	Fomesafen 2L Rate (pints per acre) Maximum Growth Stage Controlled At			
	0.75 pt/A No. of True Leaves	1 pt/A No. of True Leaves	1.25 pt/A No. of True Leaves	1.5 pt/A No. of True Leaves
Nutsedge, yellow	--	--	--	suppression only
Pigweed:				
Amaranth, Palmer	2[c]	4	4	6
Amaranth, spiny	2[c]	2	2	4
Redroot	2[c]	4	6	6
Smooth	2[c]	4	4	6
Poinsettia, wild	--	--	--	3
Purslane, common	--	multi-leaf 6" diameter	multi-leaf 6" diameter	multi-leaf 8" diameter
Pusley, Florida	--	--	--	2
Ragweed, common	2	4	4	6
Ragweed, Giant[b]	--	--	4	4
Redweed	--	--	--	3c
Sesbania, hemp	--	6	6	12
Sicklepod	--	--	--	cotyledon[c]
Sida, prickly	--	--	--	cotyledon[c]
Smartweed, Pennsylvania	2[c]	4	4	6
Smellmelon	--	--	--	2
Spurge, prostrate	--	--	--	1" diameter[c]
Spurge, spotted	--	--	--	2c
Starbur, bristly	--	2	2	4
Sunflower, common	--	--	--	2
Velvetleaf[b]	--	--	2	4
Venice mallow	2	4	4	6
Witchweed	--	multi-leaf up to 7"	multi-leaf up to 7"	multi-leaf up to 10"
Waterhemp, common	2[c]	2	2	4
Waterhemp, tall	2[c]	2	2	4
Yellow rocket	2	4	6	6

*Partial control means significant activity but not always at a level considered acceptable for commercial weed control.

[a]Do not apply in cotyledon stage.

[b]For effective control of this weed it is necessary to use 1% MSO and 2.5% UAN v/v as an adjuvant in Regions 2 and 3 (soybeans only).

[c]Partial control.

SPECIAL USE DIRECTIONS FOR SPECIAL WEED PROBLEMS

Partial Control* of Annual Grasses

The grasses listed below may be partially controlled by preemergence applications of Fomesafen 2 SL Herbicide at 1-1.5 pts./A.

Crabgrass
Goosegrass
Panicum, Texas
Signalgrass, broadleaf

The grasses listed below may be partially controlled by postemergence applications of Fomesafen 2 SL Herbicide at 1-1.5 pts./A.

Barnyardgrass
Signalgrass, broadleaf
Crabgrass
Foxtail
- Giant
- Green
- Yellow

Goosegrass
Johnsongrass, seedling
Panicum, fall
Panicum, Texas

Partial Control* of Perennial Weeds

Use of Fomesafen 2 SL Herbicide postemergence at rates of 1-1.5 pts./A will aid in suppressing the above-ground portions of the weeds listed below until crop canopy can assist in suppression. Perennial weeds continue to regrow from underground rootstocks even if above-ground foliage is temporarily controlled or retarded. Even though Fomesafen 2 SL Herbicide and crop competition can suppress perennial weeds for a growing season, the rootstocks will continue to live and reestablishment will occur in subsequent years.

Milkweed, climbing
Milkweed, honeyvine
Bindweed, field
Bindweed, hedge
Trumpetcreeper

*Partial control means significant activity but not always at a level considered acceptable for commercial weed control.

CROP USE DIRECTIONS

COTTON Preemergence Application

Apply Fomesafen 2 SL Herbicide preemergence at 1-1.5 pts./A in cotton for control or partial control of the weeds listed in Table 1. Apply as a preemergence treatment only to coarse textured soils (sandy loam, loamy sand, sandy clay loam). **Do not** apply as a preemergence treatment to

medium or fine-textured soils as crop injury will likely occur.

To broaden the weed control spectrum, Fomesafen 2 SL Herbicide may be tank mixed with other preemergence herbicides such as Caparol®, Cotoran®, Direx®, Karmex®, Solicam®, or Staple®. For control of emerged weeds, Fomesafen 2 SL Herbicide may be tank mixed with a burndown herbicide such as Paraquat Concentrate or glyphosate brands (such as Touchdown®, Roundup®) labeled in cotton. In reduced tillage plantings, Fomesafen 2 SL Herbicide can be applied up to 14 days prior to planting or at planting with a burndown herbicide. Refer to the tank-mix partner label for use directions, restrictions and limitations. The most restrictive product labeling applies.

Cotton plants are tolerant to preemergence applications of Fomesafen 2 SL Herbicide when applied at recommended rates and to coarse textured soil types. Some crinkling or spotting of cotton foliage or stunting may occur, especially if heavy rainfall occurs during or soon after cotton emergence, but cotton plants normally outgrow these effects and develop normally.

Cotton foliage is not tolerant to Fomesafen 2 SL Herbicide. Do not apply Fomesafen 2 SL Herbicide over the top of emerged cotton as unacceptable cotton injury will occur.

Post-Directed Application

Apply Fomesafen 2 SL Herbicide in emerged cotton as a post-directed treatment using precision post-directed, hooded or shielded application equipment to provide complete coverage of emerged weeds. Apply Fomesafen 2 SL Herbicide at 1-1.5 pints per acre in a minimum of 10 gallons spray solution per acre. Applications may be made broadcast or banded. Post-directed applications of Fomesafen 2 SL Herbicide will provide contact control of labeled emerged weeds and residual preemergence control of labeled weeds (once activated by rainfall or irrigation). See previous label sections for a list of weeds controlled, recommended application rates, weed growth stages, and application directions.

U.S. Label

Fomesafen 2 SL Herbicide should be applied with a non-ionic surfactant at 0.25 to 0.5% v/v, or crop oil concentrate at 1% v/v to emerged weeds. Do not add liquid nitrogen (28% or similar) to Fomesafen 2 SL Herbicide, or Fomesafen 2 SL Herbicide tank mixes in cotton.

To broaden the weed control spectrum, post-directed applications of Fomesafen 2 SL Herbicide may be tank mixed with other labeled post-directed herbicides such as Caparol, DSMA, Direx, Dual MAGNUM®, Envoke®, Karmex, Layby™ Pro, MSMA, Sequence®, or Suprend®. When applied with hooded or shielded sprayers, Fomesafen 2 SL Herbicide and Fomesafen 2 SL Herbicide tank mixes may be applied with burndown products such as Paraquat Concentrate, Sequence or glyphosate brands (such as Touchdown, Roundup) labeled for in crop application in cotton. Refer to the tank-mix partner label for use directions, restrictions and limitations. The most restrictive product labeling applies.

Cotton foliage is not tolerant to Fomesafen 2 SL Herbicide applications. Avoid contact to cotton foliage as unacceptable injury will occur. Application equipment should be calibrated (spray pressure, nozzle type and configuration, and orifice size) to avoid fine spray droplets contacting green cotton stems and foliage.

Post-Directed Application Timing in Cotton

Fomesafen 2 SL Herbicide may be applied to cotton at least 6 inches in height through layby as a post-directed application. All post-directed applications should avoid spray contact with any green non-barked parts of the cotton plant or foliage as unacceptable injury will occur. Follow the application timing recommendations below for post-directed applications in cotton.

Shield and Hooded Applications

Make a precision post-directed Fomesafen 2 SL Herbicide application to the base of the cotton plant avoiding contact with the cotton stem or foliage when cotton is at least 6 inches in height to avoid cotton injury. Use only hooded or shielded spray equipment to apply Fomesafen 2 SL Herbicide in cotton that is 6 inches to 12 inches in height. Adjust nozzles to provide full coverage of emerged target weeds.

Layby Applications

Make a post-directed Fomesafen 2 SL Herbicide application to the base of the cotton plant avoiding contact with any non-barked portion of the cotton plant or foliage. Use precision post-directed equipment or hooded or shielded sprayers on cotton that has developed a minimum of 4 inches of brown bark through layby. Application equipment should be configured to provide full coverage of emerged target weeds.

General Restrictions - Cotton

Do not apply Fomesafen 2 SL Herbicide later than 70 days before harvest.

Do not apply more than 1.5 pints per acre of Fomesafen 2 SL Herbicide in any year.

Special Use Directions for the Suppression of Woollyleaf Bursage (Lakeweed), *Ambrosia grayi*, in Texas

Apply Fomesafen 2 SL Herbicide to cultivated areas of cropland in the fall or spring as a spot treatment at a rate of 1.5 pints per acre and incorporate to a depth of 2-3 inches for suppression of woollyleaf bursage. Applications should be made with ground equipment.

The use of adjuvants, as specified under the Spray Additives section, will significantly improve the initial burndown of any emerged woollyleaf bursage, but this effect is only temporary. Therefore, an adjuvant may be used if desired, but is not necessary.

Significant suppression may not be seen until 6-8 months after application, but should then continue for at least 2 years after application. Cotton or soybeans may be planted in treated areas. Under certain conditions, significant damage may occur to cotton planted within 18 months of application. A 3-year interval from last application to planting is required for all other crops.

Do not make more than one application of Fomesafen 2 SL Herbicide per year. Do not apply more than 1.5 pints per acre of Fomesafen 2 SL Herbicide in any year. If two consecutive year applications are made, allow a 2 year interval before another application.

DRY BEANS AND SNAP BEANS Preplant Surface and Preemergence Application

Apply Fomesafen 2 SL Herbicide as a preplant surface or preemergence application in Regions 1, 2, 3, and 4 only for control or partial control of the weeds listed in Table 1. Fomesafen 2 SL Herbicide can be applied alone, or tank mixed or followed sequentially with other labeled dry bean or snap bean herbicides to broaden the weed control spectrum or control newly emerged weeds. Refer to the **Tank Mix and Sequential Application** section for additional information.

NOTE: Treated soil that is splashed onto newly emerged seedings may result in temporary crop injury but plants normally outgrow these effects and develop normally.

Postemergence Application

Apply Fomesafen 2 SL Herbicide as a postemergent broadcast application in Regions 1, 2, 3, 4 and 5 for control or partial control of the weeds listed in Table 2 and in the Special Use

Directions For Additional Weed Problems section. Application rate depends on weed species and growth stage. Two applications may be made if necessary but not to exceed the maximum rate specified per geographic region. (Refer to map for definition of specified geographic regions). Refer to the Spray Additive section for recommended spray additives. Use of crop oil concentrate can improve weed control but may slightly reduce crop tolerance. Do not use UAN (28% or similar) or ammonium sulfate on dry beans or snap beans as severe crop injury may occur. Apply when dry beans or snap beans have at least one fully expanded trifoliate leaf.

Fomesafen 2 SL Herbicide can be applied alone or in tank mix with other labeled dry bean or snap bean postemergence herbicides to broaden the weed control spectrum. Refer to the **Tank Mix and Sequential Application** section.

Some bronzing, crinkling or spotting of dry bean or snap bean leaves may occur following postemergent applications, but dry beans and snap beans soon outgrow these effects and develop normally.

Tank Mix and Sequential Applications for Dry Beans and Snap Beans
Fomesafen 2 SL Herbicide can be used sequentially or in tank mix with the following products:

Dry Beans and Snap Beans	**Dry Beans Only**
Assure II®	Frontier®
Basagran®	Select®
Dual MAGNUM	Sonalan®
Eptam®	
Poast®	
Prowl®	
Pursuit®	
Raptor®	
Treflan®	

Under certain conditions, the mixture of Fomesafen 2 SL Herbicide with one or more of the above mentioned broadleaf herbicides may cause a reduction in activity of any postemergence grass herbicide in the mixture.

For sequential applications allow 2-3 days after the application of the postemergence grass herbicide before applying Fomesafen 2 SL Herbicide or Fomesafen 2 SL Herbicide mixtures. Where Fomesafen 2 SL Herbicide or the Fomesafen 2 SL Herbicide mixture is appliedfirst, apply the grass herbicide when the grass weeds begin to develop new leaves (generally around 7 days).

NOTE: Tank-mix applications can result in increased crop injury as compared to either product used alone.

Always read and follow the recommendations, restrictions and limitations for all products whether used alone, sequentially or in a tank mix. The most restrictive labeling of any product used applies.

General Restrictions – Dry Beans and Snap Beans

- Refer to Fomesafen 2 SL Herbicide Regional Use Map for the maximum rate of Fomesafen 2 SL Herbicide (or other fomesafen containing products) that may be applied in each geographic region.
- Do not apply to any field in Regions 2, 3, 4 or 5 more than once every two years.

- **For snap beans:** Do not exceed 1.5 pints of Fomesafen 2 SL Herbicide per acre in any one year and also adhere to the maximum rate that may be applied in each geographic region (refer to the Fomesafen 2 SL Herbicide Regional Use Map). Do not graze treated areas or harvest for forage or hay. Do not utilize hay or straw for animal feed or bedding. Do not apply within 30 days of harvest.
- **For dry beans:** Do not exceed 1.5 pints of Fomesafen 2 SL Herbicide per acre in any one year and also adhere to the maximum rate that may be applied in each geographic region (refer to the Fomesafen 2 SL Herbicide Regional Use Map). Do not graze animals on green forage or stubble. Do not utilize hay or straw for animal feed or bedding. Do not apply within 45 days of harvest.

SOYBEANS Preplant Surface and Preemergence Application

Apply Fomesafen 2 SL Herbicide as a preplant surface or preemergence application in Regions 1, 2, 3, and 4 only for control or partial control of the weeds listed in Table 1. Fomesafen 2 SL Herbicide can be applied alone or tank mixed or followed sequentially with other labeled soybean herbicides to broaden the weed control spectrum or control newly emerged weeds. Refer to the **Tank Mix and Sequential Application** section for additional information.

For control of emerged weeds, Fomesafen 2 SL Herbicide may be tank mixed with a burndown herbicide such as Paraquat Concentrate or glyphosate brands (such as Touchdown or Roundup) labeled in soybeans. In reduced tillage plantings, Fomesafen 2 SL Herbicide can be applied up to 14 days prior to planting or at planting with a burndown herbicide.

Postemergence Application

Apply Fomesafen 2 SL Herbicide as a postemergence broadcast application in Regions 1, 2, 3, 4 and5 for control or partial control of weeds listed in Table 2 and in the **Special Use Directions For Additional Weed Problems** section. Application rate depends on weed species and growth stage. Refer to the Spray Additive section for recommended spray additives. To enhance postemergence control of susceptible broadleaf weeds (**soybeans only**) in Regions 2, 3, 4 and 5 (see Fomesafen 2 SL Herbicide Regional Use Map), Fomesafen 2 SL Herbicide can be used with a minimum of 2.5% liquid nitrogen (28% or similar) or a minimum of 10 pounds ammonium sulfate per 100 gallons of spray volume.
Fomesafen 2 SL Herbicide can be applied alone or in combination with other labeled soybean postemergence herbicides to broaden the weed control spectrum. Refer to the **Tank Mix and Sequential Application** section.

Some bronzing, crinkling or spotting of soybean leaves may occur following postemergent applications, but soybeans soon outgrow these effects and develop normally.

Tank Mix and Sequential Applications For Soybeans

Fomesafen 2 SL Herbicide can be used sequentially or in tank mix with one or more of the following products: Assure II, Basagran, Boundary®, Butyrac®, Classic®, Dual MAGNUM, Dual II MAGNUM®, FirstRate®, Fusilade® DX, Fusion®, Glyphosate (such as Touchdown, Roundup or Glyphomax™), Paraquat Concentrate, Harmony® GT XP, Pursuit, Poast, Poast Plus®, Prowl, Raptor, Resource®, Select®, Sequence, Scepter®, and Synchrony®STS®.

Under certain conditions, the mixture of Fomesafen 2 SL Herbicide with one or more of the above mentioned broadleaf herbicides may cause a reduction in activity of any postemergence grass herbicide in the mixture.

For sequential applications allow 2-3 days after the application of the postemergence grass

herbicide before applying Fomesafen 2 SL Herbicide or Fomesafen 2 SL Herbicide mixtures. Where Fomesafen 2 SL Herbicide or the Fomesafen 2 SL Herbicide mixture is applied first, apply the postemergence grass herbicide when the grass weeds begin to develop new leaves (generally around 7 days).

NOTE:

- Tank-mix applications can result in increased crop injury as compared to either product used alone.
- Do not exceed 1 fl. oz. of Butyrac per acre in mixture with Fomesafen 2 SL Herbicide.
- Do not exceed 0.25 oz./A of Synchrony STS herbicide in the tank with labeled rates of Fomesafen 2 SL Herbicide on non-STS varieties. This tank mix can be applied postemergence to any soybean variety for additional broadleaf weed control. Refer to the Synchrony STS label for more information and crop rotation restrictions.
- Always read and follow the recommendations, restrictions and limitations for all products whether used alone, sequentially or in a tank mix. The most restrictive labeling of any product used applies.

Roundup Ready® (Glyphosate Tolerant) Soybean Tank Mixes

Fomesafen 2 SL Herbicide at 6-12 oz./A, can be tank mixed with glyphosate products (such as Touchdown or Roundup) that are labeled for Roundup Ready (glyphosate tolerant) soybeans for improved postemergence control of many weeds such as morningglory spp., hemp sesbania, waterhemp, and black nightshade which are known to have tolerance to glyphosate, but are susceptible to Fomesafen 2 SL Herbicide.

FOLLOW THE RECOMMENDATIONS ON THE GLYPHOSATE PRODUCT LABEL FOR THE USE OF SPRAY ADDITIVES IN THIS TANK MIX.

Do not allow this tank mix to move off target as contact by even minute quantities can cause severe damage or death to any nontarget vegetation.

NOTE: Postemergence application of this tank mix on soybean varieties which do not contain the Roundup Ready gene will result in severe crop injury or death of the soybean crop. Always read and follow the recommendations, restrictions and limitations for all products used. The most restrictive labeling of any product applies.

General Restrictions – Soybeans

- Refer to Fomesafen 2 SL Herbicide Regional Use Map for the maximum rate of Fomesafen 2 SL Herbicide (or other fomesafen containing products) that may be applied in each geographic region. Do not apply to any field in Regions 2, 3, 4 or 5 more than once every two years.
- Do not exceed 1.5 pints of Fomesafen 2 SL Herbicide per acre in any one year and also adhere to the maximum rate that may be applied in each geographic region (refer to the Fomesafen 2 SL Herbicide Regional Use Map). Do not graze treated areas or harvest for forage or hay. Do not apply within 45 days of harvest.

AERIAL SPRAY DRIFT MANAGEMENT ADVISORY

SPRAY DRIFT MANAGEMENT

AVOIDINGSPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR. The interaction of many equipment and weather related factors determines the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

1. 1. The distauce of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
2. 2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they should be observed.

The applicator should be familiar with and take into account the information covered in the **Aerial Drift Reduction Advisory Information.**

Aerial Drift Reduction Advisory Iuformation IMPORTANCE OF DROPLET SIZE

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (See **Wind, Temperature** and **Humidity,** and **Temperature Inversion** sections of this label).

CONTROLLING DROPLET SIZE

- Volume - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** - Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of nozzles** -Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation** -Orienting nozzles so that the spray is released backwards, parallel to the airstream will produce larger droplets than other orientations. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type** - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce larger droplets than other nozzle types.

BOOM LENGTH

For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

APPLICATION HEIGHT

Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

SWATH ADJUSTMENT
When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller drops, etc.).

WIND
Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. **NOTE:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

TEMPERATURE AND HUMIDITY
When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

TEMPERATURE INVERSIONS
Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

SENSITIVE AREAS
The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, nontarget crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

APPENDIX

COMMON NAME	SCIENTIFIC NAME
Amaranth, Palmer	*Amaranthus palmeri*
Amaranth, spiny	*Amaranthus spinosus*
Anoda, spurred	*Adoda cristata*
Balloonvine	*Cardiospermum halicacabum*
Barnyardgrass	*Echinochloa crus-galli*
Bindweed, field	*Convolvulus arvensis*
Bindweed, hedge	*Calystegia sepium*
Broadleaf signalgrass	*Bracharia platyphylia*
Carpetweed	*Mullugo verticillata*
Citron (wild watermelon)	*Citrullus vulgaris*
Cocklebur, common	*Xanthium strumarium*
Copperleaf, hophornbeam	*Acalypha ostryifolia*
Copperleaf, Virginia	*Svs;ufjs bothomovs*
Crabgrass	*Digitaria* spp.
Crotalaria, showy	*Crotolaria spectabilis*
Croton, tropic	*Croton glandulosus*
Cucumber, volunteer	*Cucumis sativas*
Eclipta	*Eclipta prostrate*
Foxtail, giant	*Setaria faberi*
Foxtail, green	*Setaria virdis*
Foxtail, yellow	*Setaria glauca*
Goosegrass	*Eleusine indica*
Groundcherry, cutleaf	*Physalis angulata*
Hemp	*Cannabis sativa*
Horsenettle	*Solanum carolinense*
Jimsonweed	*Datura stramonium*
Johnsongrass, seedling	*Sorghum halapense*
Ladysthumb	*Polygonum persicaria*
Lambsquarters, common	*Chenopodium album*
Mexicanweed	*Caperonia castanifolia*
Milkweed, climbing	*Sarcostemma cyanchoides*
Milkweed, honeyvine	*Ampelamus albidus*
Morningglory:	
Cypressvine	*Ipomoea quamoclit*
Entireleaf var.	*Ipomoea hederacea* var. *intergriuscula*
Ivyleaf	*Ipomoea hederacea*
Purple moonflower	*Ipomoea turbinate*
Red (scarlet)	*Ipomoea coccinea*
Smallflower	*Jacquemontia tamnifolia*
Pitted (smallwhite)	*Ipomoea lacunose*
Tall (common)	*Impmoea purpurea*
Palmleaf (willowleaf)	*Impmoea wrightii*
Mustard, wild	*Sinapis arvensis*

COMMON NAME	SCIENTIFIC NAME
Nightshade, black	*Solanum nigrum*
Nightshade, Eastern black	*Solanum ptychanthum*
Nightshade, hairy	*Solanum physalifolium*
Nutsedge, yellow	*Cyperus esculentus*
Panicum, fall	*Panicum dichotomiflorum*
Panicum, Texas	*Panicum texanum*
Pigweed:	
Amaranth, Palmer	*Amaranthus palmeri*
Amaranth, spiny	
Redroot	*Amaranthus retroflexus*
Smooth	*Amaranthus hybridus*
Poinsettia, wild	*Euphorbia heterophylla*
Purslane, common	*Portulaca oleracea*
Pusley, Florida	*Richardia scabra*
Ragweed, common	*Ambrosia artemisifolia*
Ragweed, Giant	*Ambrosia trifida*
Redweed	*Melchia corchorifolia*
Sesbania, hemp	*Sesbania exaltata*
Sicklepod	*Senna obtusifolia*
Sida, prickly	*Sida spinosa*
Signalgrass, broadleaf	*Bracharia platyphylia*
Smartweed, Pennsylvania	*Polygonum pennsylvanicum*
Smellmelon	*Cucumis melo*
Spurge, prostrate	*Chamaesyce humistrata*
Spurge, spotted	*Chamaesyce maculate*
Starbur, bristly	*Acanthospermum hispidum*
Sunflower, common	*Helianthus annuus*
Trumpetcreeper	*Campis redicans*
Velvetleaf	*Abutilon theophrasti*
Venice mallow	*Hibiscus trionum*
Waterhemp, common	*Amaranthus rudis*
Waterhemp, tall	*Amaranthus tuberculatos*
Witchweed	*Striga asiatica*
Yellow rocket	*Barbarea vulgaris*

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

Prohibitions
Open dumping is prohibited. Do not reuse empty container.

Pesticide Storage
Store above 32°F in original containers only. If product freezes, return to room temperature and agitate to reconstitute. Keep container closed when not in use. Do not store near food or feed. In case of spill or leak on floor or paved surfaces, soak up with sand, earth or synthetic absorbent. Remove to chemical waste area.

Pesticide Disposal
Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

Container Handling
Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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PRIA DUE DATE: 6/30/11 # 87655-E

Note to: File 6/9/11
From: Michael Walsh, RD/Herbicide Branch, Tel: 308-2972
Re: New Product Registration, R301
Product Name: Fomesafen 2 SL Herbicide
Active Ingredients: Fomesafen at 22.8%
EPA Registration Number: 87655-2 (-E)
Submission Dates: June 30, 2011
Decision Number: 441198

Action

- Registration of new Fomesafen end-use product (cotton, dry beans, snap beans, and soybeans).
- **Cited Product** - The registrant's application cited 100-993 as a similar/identical product.

Acute Toxicology Reviews (R. Whiting, 2/7/11)

- **RESTRICTED USE for Tox I Primary Eye Irritation** - The review states that this product should be categorized as a restricted use product due to irreversible eye damage. Current RD practice does not support this TRB recommendation. ✓ KMM 6/27/11.
- **CRP Required** - The review requires Child Resistant Packaging. This requirement makes sense for certain products, but not for this agricultural use product. It is not required in the Notice of Registration for this product. ✓ KMM 6/27/11
- **Substantial Similarity** - The product is substantially similar to the cited product (100-993)
- **Exceeds Requirements** - The proposed label language for First Aid, Precautionary Statements, and User Safety Recommendations exceeds the Agency requirements outlined in the TRB review. In item 4 at the bottom of page 3, the acute toxicology review states that "TRB finds this additional labeling information acceptable.", which is appropriate since the cited product label bears this same information.

TRB Chemistry Reviews

S. Mathur, 2/7/11

- The originally proposed and revised Basic and Alternates CSFs and accompanying data are not acceptable.
- A deficiency letter was issues on March 1, 2011. See product jacket for letter.

B. Kitchens, 5/31/11

- The Basic and Alternate CSFs dated 5/26/11 are acceptable.
- Group A and B data are acceptable - with the exception of Storage Stability and Corrosion Characteristics data required within 15 months of the date on the Notice of Registration.
- This second chemistry review determined that this new product is similar to the cited product (100-993).

SEE NEXT PAGE

Label Review

- The proposed product label was compared to the cited product labels (dated October 17, 2008 and February 28, 2011), and it is almost identical.
- Per the TRB Acute Toxicology Review:
  - the registrant is being required to change the order of the First Aid statements to match the review;
  - additional information appropriate for Tox I Primary Eye Irritation must be added to the NOTE TO PHYSICIAN in the First Aid box;
  - the protective eyewear requirement is being enhanced to read "Protective eyewear (goggles, face shield, or safety glasses).";
  - the phrase "Remove and wash contaminated clothing before reuse." must be added to the User Safety Recommendations box.
- For the purposes of clarity, the registrant is being instructed to add a header to the GROUNDWATER ADVISORY statement.

Unconditional Registration

- Per RD's new policy, new product registrations requiring Storage Stability and Corrosion Characteristics data are not considered conditional registrations. In keeping with the new policy, the Notice of Registration is clearly marked as an *Unconditional* registration.

DP BARCODE No.: D389371 **FILE SYMBOL No.:** 87655-E **DECISION No.:** 441198
PRODUCT NAME: Fomesafen 2 SL Herbicide
PC Code: 123802 **ACTION CODE:** R 301 **FOOD Use:** Yes

DATE OUT: May 31, 2011

SUBJECT: End Use Product Chemistry Review
Product Name: Fomesafen 2 SL Herbicide

FROM: Bruce F. Kitchens, Chemist
Product Chemistry Team
Technical Review Branch/RD (7505P)

Bruce F. Kitchens
31 May 2011

TO: RM 23, Kathryn Montague/Michael Walsh
Herbicide Branch / RD (7505P)

SBun 5/31/11

Company Name: Orion Fomes, LLC
Formulation Type: Soluble Liquid

INTRODUCTION:

The registrant, Orion Fomes, LLC, is responding to a previous product chemistry review (D383751 2/7/11) for the proposed product, Fomesafen 2 SL Herbicide. In that review, it was determined that the basic and alternate Confidential Statements of Formula (CSFs) dated 04 Feb 011 were not acceptable. It was also determined that several product chemistry data requirements were not acceptable. The CSFs were not acceptable because the active ingredient listed on the label ingredient statement and the proposed basic CSF is not the same. The data requirement for pH reported two different values on the CSF and in the data report. With this response, the registrant has submitted a rationale for the different active ingredient names on the CSF and the label ingredient statement (MRID# 484556-01) plus product chemistry data for pH (MRID# 484556-02). Revised basic and alternate CSFs dated 26 May 2011 were also submitted. The registrant also states that the proposed product is substantially similar to EPA Reg. No. 100-993. The Technical Review Branch (TRB) has been asked to review this submission.

SUMMARY OF FINDINGS:

1. Name of Active Ingredient: Fomesafen Sodium salt (22.8% a.i.)

2. Has the registrant claimed substantial similarity to a registered product?

   [X] Yes; [ ] No; [[NA; if yes give the registration number of the cited product.

   EPA Reg. No: 100-993

3. All of the source materials of the active ingredient are derived from registered sources- [X] Yes [[No

4. All inert ingredients have been screened by IIAB (and found to be approved for the proposed labeled uses.

5. Confidential Statements of Formula:

   [X] Basic - Dated: 26 May 2011

   [X] Alternate CSF – Dated: 26 May 2011

   Alternate CSF complies with 40CFR§152.43: [X] Yes; [ ] No; [ ] NA

6. Product label

a. Ingredient statement: Nominal concentration of AI listed on CSFs concurs with product label (PR Notice 91-2).
[X] Yes, if not, explain below:

Is the sub statement in compliance with PR Notice 97-6 (inert ingredient vs other ingredient)
[X] Yes; [ ] No; if not, explain below

Metallic equivalent: [ ] Yes [ ] NA;
Soluble arsenic: [[Yes [[NA
Isomeric ratios: [ ] Yes [ ] NA
Acid Equivalent: [X[Yes acid equivalent = 21.7% a.i.

b. Health related sub statements: Product contains?

Petroleum distillate at > 10%: [[Yes; [ ] No; [X] NA
Methanol at > 4%: [[Yes; [ ] No; [X] NA
Sodium nitrate/sodium nitrite [[Yes; [[No; [X[NA

c. Physical chemical hazard statement: Product label requires a statement per 40 CFR §156.78 for: flammability, explosive potential or electric insulator breakdown?
[[Yes [X[No

Is the sub statement in compliance with PR Notice 98-6 (Total Release Fogger)?
[ ] Yes; [[No; [X[NA; if not, explain below

d. Label requires an additional Storage and Disposal statement: [[Yes [X] No; if yes explain below:

7. Group A: Product Chemistry Data

TRB's determination of the acceptability for the proposed product is listed in the tables below.

Guideline No.	Study Title		Data submitted		TRB's Assessment of Data	MRID Nos.
			Yes	No		
830.1550	Product Identity & Composition		X		A	482656-01
830.1600	Description of materials used to produce the product		X		A	482656-01
830.1650	Description of formulation process		X		A	482656-01
830.1670	Discussion on the formation of impurities		X		A	482656-01
830.1700	Preliminary analysis			X	NA	
830.1750	Certified limits (158.350)	Standard certified limits	X		A	see csf 5/26/11
		Proposed Limits				
		Justification for wider limits				
830.1800	Enforcement analytical method		X		A	482656-02

A = Acceptance, N = Not Acceptable, G = Data Gap, W = Waiver Request, I = In Progress, NA = Not Applicable; U = Upgradeable.

8. Group B:

Guideline No.	Study Title	Value or Qualitative Description	TRB's Assessment of Data	MRID Nos.
830.6303	Physical State	Clear yellow odorless liquid @ 19°C	A	484556-02
830.6315	Flammability	Product does not contain combustible components	NA	
830.6316	Explodability	Product does not contain explosive components	NA	
830.7000	pH	6.7 - 7.0	A	484556-02
830.7300	Density (units)	1.106 g/ml @ 19°C	A	484556-02

A = Acceptance, N = Not Acceptable, G = Data Gap, W = Waiver request, NA = Not applicable, I = In progress; U = Upgradeable.

DP BARCODE No.: D389371 **FILE SYMBOL No.:** 87655-E **DECISION No.:** 441198
PRODUCT NAME: Fomesafen 2 SL Herbicide
PC Code: 123802 **ACTION CODE:** R 301 **FOOD Use:** Yes

CONCLUSIONS:

The TRB has reviewed the product chemistry data submitted for the proposed end-use product and has concluded that:

1. The proposed basic formula CSF dated 26 May 2011 is acceptable and attached.
2. The proposed alternate CSF dated 26 May 2011 is acceptable and attached.
3. All required Group A data were reviewed and determined to be acceptable.
4. All required Group B data were reviewed and determined to be acceptable; except - guidelines 830.6317 (storage stability) and 830.6320 (corrosion characteristics). The registrant is required to generate one year storage stability & corrosion characteristics study. The recommended observations periods are 0, 1, 3, 6, 9, & 12 months intervals.
5. The proposed product is substantially similar in composition to EPA Reg No. 100-993 Reflex Herbicide.
6. The proposed label was screened as it pertains to the product chemistry requirements. The final review of the proposed label and uses are the purview of the PM team.
7. The proposed alternate formula meets the criteria specified in 40 CFR 152.43 with respect to alternate formulations.

DP BARCODE No.: D383751 **FILE SYMBOL No.:** 87655-E **PRODUCT NAME:** Fomesafen 2 SL Herbicide
DECISION No.: 441198 **PC Code(s):** 123802 **ACTION CODE:** R 301 **FOOD Use:** Yes

DATE OUT: February 7, 2011

SUBJECT: End Use Product Chemistry Review
Product Name: Fomesafen 2 SL Herbicide

FROM: Shyam Mathur,
Product Chemistry Team Leader
Technical Review Branch/RD (7505P)

TO: Michael Walsh / Kathryn Montague, RM 23
Herbicide Branch / RD (7505P)

Company Name: Orion Fomes, LLC
Formulation Type: Soluble Liquid (SL)

INTRODUCTION:

The registrant has submitted an application for the registration of the new end use product "Fomesafen 2 SL Herbicide". In support of the registration application, the registrant has submitted 830 series group A product chemistry data with MRID Nos. 482656-01 & 482656-02. The group B (physical-chemical property) data has been submitted in compliance with self certification program with MRID No. 475493-01. The registrant has also submitted CSF's for basic and alternate formulations (both dated 10-15-10) and the product label. On the advice of the Agency, the registrant has submitted the revised basic & alternate CSF (both dated 02-04-11) on February 4, 2011 by e-mail. The registrant has claimed that the proposed product is substantially similar to registered product with Reg. No. 100-993. TRB has been asked to determine the acceptability of the product chemistry data submitted to support the proposed CSF's and also determine the substantial similarity to the registered product.

SUMMARY OF FINDINGS:

1. Name of Active Ingredient(s): Sodium salt of Fomesafen (22.8%).

2. The registrant claims this product is substantially similar in composition to Reg. No. 100-993.

3. All of the source materials of the active ingredient are derived from registered sources- [X[Yes [[No

4. All inert ingredients have been screened by IIAB (10-21-10) and found to be approved for the proposed labeled uses.

5. Confidential Statement of Formula(s):

   [X[Basic - Dated: 10-15-10; Re-submitted: Dated - 02-04-11

   [X] Alternate CSF #1: – Dated: 10-15-10; Re-submitted: Dated – 02-04-11

   Alternate CSF(s) complies with 40CFR§152.43: [X] Yes [[No [[NA

Note: The name of the active ingredient (Fomesafen technical) in the basic & alternate CSF's does not concur with the name of AI (sodium salt of Fomesafen) on the product label.

6. Product label

a. Ingredient statement: Nominal concentration of AI listed on CSF(s) concurs with product label (PR Notice 91-2).

[X] Yes, if not, explain below:

Metallic equivalent: [ ] Yes [X] NA;
Soluble arsenic: [ ] Yes [X) NA
Isomeric ratios: [ ] Yes [X] NA
Acid Equivalent: [X] Yes; 21.7% acid equivalent of Fomesafen

b. Health related sub statements: Product contains?

Petroleum distillate at > 10%: [ ] Yes [X] No [ ] NA
Methanol at > 4%: [ ] Yes [X) No [ ] NA

c. Physical chemical hazard statement: Product label requires a statement per 40 CFR §156.78 for: flammability, explosive potential or electric insulator breakdown?
[ ] Yes [X] No

Is the sub statement in compliance with 40CFR§156.78 [X] NA, if not, explain below:

d. Label requires an additional Storage and Disposal statement: [ ] Yes [X] No; if yes explain below:

7. Group A: Product Chemistry Data

TRB's determination of the acceptability for the proposed product is listed in the tables below.

Guideline No.	Study Title		Data submitted		TRB's Assessment of Data	MRID Nos.
			Yes	No		
830.1550	Product Identity & Composition		X		N	482656-01
830.1600	Description of materials used to produce the product		X		N	482656-01
830.1650	Description of formulation process		X		N	482656-01
830.1670	Discussion on the formation of impurities		X		N	482656-01
830.1700	Preliminary analysis		NA			
830.1750	Certified limits (158.350)	Standard certified limits	X			482656-01
		Proposed Limits				
		Justification for wider limits				
830.1800	Enforcement analytical method		X		A	482656-02

A = Acceptance, N = Not Acceptable, G = Data Gap, W = Waiver Request, I = In Progress, NA = Not Applicable; U = Upgradeable.

8. Group **B:**

Guideline No.	Study Title	Value or Qualitative Description	TRB's Assessment of Data	MRID Nos.
830.6303	Physical State	Liquid	A	475493-01
830.6315	Flammability	NA		
830.6316	Explodability	NA		
830.7000	pH	5.22 (data) 9.0 (CSF, 02-04-11)	N	475493-01
830.7300	Density (units)	1.11g/ml (9.25 lbs/gal)	A	475493-01

A = Acceptance, N = Not Acceptable, G = Data Gap, W = Waiver request, NA = Not applicable, I = In progress; U = Upgradeable.

830.6314: oxidation/reduction (MRID No. 475493-01):

The test substance reacted with an oxidizing agent showing an increase in temperature of 8°C.

DP BARCODE No.: D383751 **FILE SYMBOL No.:** 87655-E **PRODUCT NAME:** Fomesafen 2 SL Herbicide
DECISION No.: 441198 **PC Code(s):** 123802 **ACTION CODE:** R 301 **FOOD Use:** Yes

CONCLUSIONS:

The TRB has reviewed the product chemistry data submitted for the proposed end-use product and has concluded that:

1. The proposed revised CSF's for basic & alternate formulations (both dated 02-04-11) are not acceptable for the following reasons:

- The pH values given in the data (5.22) does not agree with the pH value (9.0) given the CSF's. The registrant must clarify which one is the correct value of the pH for the product and correct the CSF accordingly.
- The name of the active ingredient (Fomesafen technical) given in the CSF's does not concur with the name of the AI (sodium salt of fomesafen) given on the product label. The source of the AI (File Symbol No. 87655-R) mentioned in the CSF is sodium salt of fomesafen (98%). The registrant is advised to correct the CSF's and calculate the nominal of the active ingredient based on the 98% sodium salt of fomesafen. There is no need to add sodium hydroxide to form the sodium salt.

2. The data submitted corresponding to guidelines 830.1600 (description of materials used to produce the product), 830.1650 (description of formulation process), and 830.1670 (discussion on the formation of impurity), 830.1750 (certified limits)) are not acceptable. The registrant is required to submit the MSDS of the source product of the active ingredient (File Symbol No. 87655-R) used in he formulation. The formulation process needs to be revised if the applicant is planning to use the active ingredient with File Symbol No. 87655-R as the source product.

3. The data submitted for the guideline 830.1800 (enforcement analytical method) is acceptable.

4. The product chemistry data submitted corresponding to guidelines 830.6302 (color), 830.6303 (physical state), 830.6304 (odor), 830.6314 (oxidizing/reduction), 830.7100 (viscosity) and 830.7300 (density) are acceptable.

5. The pH (830.7000) value reported on the CSF (9.0) does not concur with the value of 5.22 provided in the data with MRID No. 475493-01. The registrant is required to verify the correct value for the pH. This data needs upgrading.

6. The registrant has submitted (MRID No. 479005-01) the results of one year storage stability (830.6317) and corrosion characteristics (830.6320) studies which indicated that the test substance is stable for more than one year and has no corrosive effects on the commercial packaging.

7. The similarity of the proposed product with File Symbol No. 87655-E to the cited product with Reg. No. 100-993 will be determined once the registrant submits the corrected CSF's or the product label.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY AND
POLLUTION PREVENTION

TECHNICAL REVIEW BRANCH
SIMILARITY DETERMINATION

07/FEB/2011

MEMORANDUM

Subject:	Name of Pesticide Product:	FOMESAFEN 2 SL HERBICIDE
	EPA File Symbol:	87655-E
	DP Barcode:	D383752
	Decision No.:	441198
	Action Code:	R301
	PC Code:	123802 Sodium salt of Fomesafen

From: Rick J. Whiting, Biologist
Technical Review Branch (TRB)
Registration Division (7505P)

R. Whiting

Y Hashi
Lead Toxicologist

To: Michael Walsh / Kathryn Montague, RM Team 23
Herbicide Branch
Registration Division (7505P)

Applicant: Orion Fomes, LLC
P.O. Box 21720
Mesa, AZ 85277

FORMULATION FROM LABEL:

Active Ingredient(s):	% by wt
123802 Sodium salt of Fomesafen (CAS No. 108731-70-0)	22.8
Inert Ingredient(s):	77.2
Total:	100.0%

ACTION REQUESTED: The Risk Manager requests: "TRB Toxicology: Please review the attached information for new product registration 87655-E and determine acceptability. Please note the registrant is citing 100-993 as a substantially similar product. Please determine if the two products are substantially similar. Please provide appropriate Precautionary Statements for the product."

BACKGROUND: Orion Fomes, LLC has submitted a data matrix dated September 16, 2010, a Basic Formulation CSF and a Alternate Formulation CSF both dated October 15, 2010 and a proposed label to support the registration of FOMESAFEN 2 SL HERBICIDE, EPA File Symbol 87655-E. The registrant is claiming 87655-E is substantially similar to REFLEX™ Herbicide, EPA Reg. No. 100-993 (transferred from EPA Reg. No. 10182-83).

In the submitted data matrix, the cited acute six pack listed MRID numbers 474825-03 thru -08. A search of the OPP electronic databases revealed that these studies were submitted to support the registration of another Sodium salt of Fomesafen containing product, Cheminova Fomesafen 1.88 Herbicide, EPA Reg. No. 67760-94. Since the cited studies are for a different product, they cannot be used to generate an acute toxicity profile for 87655-E. A further search of the electronic databases revealed that an acute six pack was submitted to support the registration of 100-993.

COMMENTS AND RECOMMENDATIONS:

1. TRB has compared the Basic Formulation CSFs submitted for 87655-E and 100-993 (dated November 15, 1999) and concluded that the two products are substantially similar in toxicity. Therefore, TRB will generate an acute toxicity profile for 87655-E using the acute toxicity studies submitted to support the registration of 100-993 (D. Ritter; D224415; EPA Reg. No. 10182-83; 29/JUL/1996). The registrant should resolve any data compensation issues.

2. The acute toxicity profile for FOMESAFEN 2 SL HERBICIDE, EPA File Symbol 87655-E, is as follows:

Acute oral toxicity	III	Cited	EPA Reg. No. 100-993
Acute dermal toxicity	III	Cited	EPA Reg. No. 100-993
Acute inhalation toxicity	IV	Cited	EPA Reg. No. 100-993
Primary eye irritation	I	Cited	EPA Reg. No. 100-993
Primary dermal irritation	IV	Cited	EPA Reg. No. 100-993
Dermal sensitization	Negative	Cited	EPA Reg. No. 100-993

3. Based on the acute toxicity profile above, as well as information from the CSF and proposed labeling, the following would be its precautionary and first aid labeling, as obtained from the Label Review System:

PRODUCT ID #: 087655-00002

PRODUCT NAME: FOMESAFEN 2 SL HERBICIDE

PRECAUTIONARY STATEMENTS

SIGNAL WORD: DANGER

Hazards to Humans and Domestic Animals:

Restricted Use Pesticide due to primary eye toxicity categories. For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification. Child Resistant Packaging Required.

Corrosive. Causes irreversible eye damage. Harmful if absorbed through skin. Harmful if swallowed. Avoid contact with skin, eyes or clothing. Wear protective eyewear (goggles, face shield, or safety glasses). Wear long-sleeved shirt and long pants, socks, shoes, and gloves.

First Aid:

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice.

If on skin: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

If swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything to an unconscious person.

User Safety Recommendations:

Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

NOTE TO PHYSICIAN: Note to PM/CRM/Registrant: The proposed label should contain a Note to Physician which addresses the category I Primary Eye Irritant toxicity. The following statements are suggested types of information that may be included, if applicable: technical information on symptomatology; use of supportive treatments to maintain life functions; medicine that will counteract the specific physiological effects of the pesticide; company telephone number to specific medical personnel who can provide specialized medical advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-xxx-xxxx for emergency medical treatment information.

4. In addition, TRB noted that the registrant has included additional First Aid, Precautionary Statements, information on Personal Protective Equipment (PPE) and User Safety Recommendations. TRB finds this additional labeling information acceptable.

5. The proposed Basic Formulation CSF and Alternate Formulation CSF both dated October 15, 2010 should be approved by the TRB Product Chemistry Team.

6. This memorandum pertains only to the decision concerning whether the subject product is similar to the cited product from an acute toxicological view point. For the purposes of this action, TRB has made no further determination of the adequacy of the toxicological database or the precautionary label of the cited product.

Assoc. w/ Decision # 411178

RE: Fomesafen end-use product

Bruce Kitchens to: Robert Hawk 05/26/2011 09:27 AM

Mr. Hawk,

There is a slight misunderstanding regarding the addition of fomesafen sodium salt to the CSF.

Fomesafen must still be listed on the CSF in box 10. The name and address is listed in box 11. List the amount of technical product in box 13 a and the percent by weight in box 13 b. In box 15, active ingredient precursor is okay.

Create a row under the fomesafen entry and list fomesafen sodium salt in box 10. No name and address is required in box 11. A registration is not required in box 12. Box 13 a will not require an amount. Fill in boxes 13 b, 14 a, and 14 b. In box 15, list active ingredient as the purpose in formulation.

The remainder of the CSF can be completed as usual. Please revise the date in box 21 to reflect the current date.

With regard the removal of [redacted] from the formulation. I believe that an error was made in thinking that the source of the active ingredient was fomesafen sodium salt. We know that is not the case here. Please formulate your product in the manner that you desire. If you have any questions or comments, please call 703-308-9372 or e-mail. Thank you for your time and consideration in completing this action.

BKitchens

Inert ingredient information may be entitled to confidential treatment

RE: Fomesafen end-use product
Robert Hawk to: Bruce Kitchens 05/25/2011 06:00 PM
Cc: Michael Walsh, Shyam Mathur

ASSOCIATED WITH DECISION # 414198

Dear Mr. Kitchens,

Thank you for your explanation. Revised CSFs are attached. The active ingredient is now defined as the sodium salt of fomesafen, and [redacted] has been removed from the CSF, although it is discussed in the manufacturing process.

Please let me know if any other revisions are required.

Regards.

Robert Hawk

-----Original Message-----
From: Kitchens.Bruce@epamail.epa.gov [mailto:Kitchens.Bruce@epamail.epa.gov]

Sent: Wednesday, May 25, 2011 12:38 PM
To: zaphawk@aol.com; rhawk@solerasd.com
Cc: Walsh.Michael@epamail.epa.gov; Mathur.Shyam@epamail.epa.gov
Subject: Fomesafen end-use product

Good Afternoon Mr. Hawk,

My name is Bruce Kitchens and I am the chemist assigned to review product chemistry data for the proposed end-use product, Fomesafen 2 SL Herbicide. I have reviewed your response to the Agency's comments and submit the following:

Product chemistry data submitted for pH is acceptable.

The question regarding the proposed basic CSF is unresolved at this time. Given the characteristics of this formulation, there is no question that the active ingredient in this product is the sodium salt of formesafen. This is acknowledged by you as it is listed as the active ingredient on the proposed label. What remains is whether the active ingredient, fomesafen sodium salt, is listed on the proposed CSF. The Agency requires that the active ingredient identified on the label and the Confidential Statement of Formula (CSF) be the same. Otherwise it will appear that two different active ingredients have been permitted for a single active ingredient product. The Agency does agree that fomesafen undergoes a conversion when the formulation is mixed. However, this does not preclude the sodium salt of fomesafen from being listed on the CSF.

Approval of the CSFs without the revision to the basic and alternate CSFs cannot be granted at this time.

Revised basic and alternate CSFs can be submitted directly to me within the next 24 hours. This will allow me to complete my review by the 31st of May.

I can be reached via e-mail or by phone @ 703-308-9372.

Bruce Kitchens

ASSOCIATED WITH DECISION #: 441198

RE: 87655-E. Certification form. CSF?
Robert Hawk to: Michael Walsh 05/03/2011 10:42 AM

Dear Mr. Walsh:

The basic and alternate CSFs are attached. In the interests of time we have foregone concerns about confidentiality.

Regards.

Robert Hawk

-----Original Message-----
From: Walsh.Michael@epamail.epa.gov [mailto:Walsh.Michael@epamail.epa.gov]
Sent: Tuesday, May 03, 2011 4:41 AM
To: Robert Hawk
Subject: RE: 87655-E. Certification form. CSF?

Dear Mr. Wright:

Please send the CSF.

Thank you for your prompt attention to this matter.

Michael Walsh
Registration Division, Herbicide Branch
Office of Pesticide Programs
US EPA

From: "Robert Hawk" <rhawk@solerasd.com>
To: Michael Walsh/DC/USEPA/US@EPA
Date: 05/01/2011 02:31 PM
Subject: RE: 87655-E. Certification form. CSF?

Dear Mr. Walsh:

I apologize for not responding sooner. I was traveling last week and did not have access to e-mail.

Form 8570-34 is attached.

A slightly revised CSF is contained on pages 21 and 22 of Report No. OF1103 in the recent submission. The pH of the formulation was revised based upon the information in the other report in the recent submission. I apologize for not having submitted an additional copy of the CSF separately. Is it possible for you to simply copy those two pages from the report to file as

the revised CSF? If not, I will send you a separate copy of the CSF immediately.

Again, my apologies for the oversight.

Regards.

Robert Hawk

-----Original Message-----
From: Walsh.Michael@epamail.epa.gov [
mailto:Walsh.Michael@epamail.epa.gov]
Sent: Wednesday, April 27, 2011 9:40 AM
To: Robert Hawk
Subject: 87655-E. Certification form. CSF?

Dear Mr. Hawk:

1] Your submission dated April 13, 2011 does not have a certification form accompanying the data matrix. Please provide the certification form as soon as possible.

2) It is my understanding that you do not plan to revised the proposed CSF, and did not submit a CSF with this package. Is my understanding correct?

Please response as soon as possible.

Thank you for your prompt attention to this matter.

Michael Walsh
Registration Division, Herbicide Branch
Office of Pesticide Programs
U.S. EPA

From: "Robert Hawk" <rhawk@solerasd.com>
To: Michael Walsh/DC/USEPA/US@EPA
Date: 04/14/2011 10:17 AM
Subject: RE: 87655-E. Additional Information Required.

Dear Mr. Walsh,

Your e-mail is timely. Our new report was somewhat delayed, but our response was shipped yesterday and will arrive at the Document Processing
Desk on Monday, April 18. It includes a product chemistry study and a rebuttal addressing the Technical Review Branch review. We understand the
need for a PRIA extension but we hope that the review can be expedited since
the issues involved are not complicated. As I said before, the only "substantive" issue is a question of the pH of the formulation. All remaining issues derive from an unfortunate misunderstanding of the reviewer.

Regards.

Robert Hawk

-----Original Message-----
From: Walsh.Michael@epamail.epa.gov [
mailto:Walsh.Michael@epamail.epa.gov]
Sent: Thursday, April 14, 2011 3:43 AM
To: Robert Hawk
Subject: 87655-E. Additional Information Required.

Dear Mr. Hawk:

According to our records, we have not yet received any additional information from you for the registration of 87655-E. Per the February 7, 2011 End Use Product Chemistry Review, the proposed basic and alternate CSF are not acceptable. Please consult the chemistry report for additional details and requirements for this product.

Please note that the review cycle for product chemistry is 90 days from the date of receipt, and that the renegotiated PRIA date of June 30, 2011 is based on additional chemistry information being provided to us on or about April 1.

Please let me know your plans for submitting additional chemistry information for the registration of 87655-E.

Thank you for your prompt attention to this matter.

Michael Walsh
Registration Division, Herbicide Branch
Office of Pesticide Programs
U.S. EPA

From: "Robert Hawk" <zaphawk@aol.com>
To: Michael Walsh/DC/USEPA/US@EPA
Date: 03/03/2011 10:56 AM
Subject: RE: 87655-E. Chemistry Workgroup Review.

Dear Mr. Walsh,

It would be incorrect to revise the CSF as you have recommended. I reiterate that the formulation process is perhaps unique in that the active ingredient is converted into another chemical during formulation. This
change is not profound; an acid is simply converted into its sodium salt.
The starting material is Fomesafen Technical [not fomesafen-sodium).

[redacted]

It is unclear why the Technical Review Branch is having such difficulty with this concept. Perhaps it would be useful for the Agency to review

previously registered formulations of fomesafen-technical. One of the sources of technical material in our CSFs is [redacted] The CAS number on the label identifies this product to be the acid, not the sodium salt. [redacted] so previous EPA reviewers have obviously understood the concept.

I think that a formal response to the Agency's review can be made on approximately April 1. We agree to a 90-day extension of the PRIA date. We request, however, that a review of our submission be expedited. The only substantive issue to be reviewed is the pH, and this will involve reviewing a report of less than 10 pages. All other issues involve a misunderstanding of the chemistry involved.

Regards.

Robert Hawk

-----Original Message-----
From: Walsh.Michael@epamail.epa.gov (
mailto:Walsh.Michael@epamail.epa.gov]
Sent: Thursday, March 03, 2011 8:15 AM
To: Robert Hawk
Subject: RE: 87655-E. Chemistry Workgroup Review.

Dear Mr. Hawk:

Thank you for your response.

Per your email below, you have identified sodium salt of fomesafen as the active ingredient for this new product. Your CSF must be revised to reflect that the active ingredient is sodium salt of fomesafen. For example, you may list "Sodium Salt of Fomesafen" in the first box of column 10. In the subsequent boxes below that statement you may list the ingredients as they now appear. Your email states that the pH issue will also be addressed in your resubmission.

The new PRIA due date will be 90 days after the Agency receives your submission. Please provide me with a firm date when you expect to submit the revised CSF and information to address the pH discrepency. We also need you to agree to the extension in the PRIA due date.

Please let me know.

Thank you.

Michael Walsh
Registration Division, Herbicide Branch
Office of Pesticide Programs
U.S. EPA

From: "Robert Hawk" <zaphawk@aol.com>
To: Michael Walsh/DC/USEPA/US@EPA

Date: 03/03/2011 09:18 AM
Subject: RE: 87655-E. Chemistry Workgroup Review.

Dear Mr. Walsh,

Thank you for these comments. The Agency's review of February 7 addresses only one "substantive" issue, which is the pH of the formulation.
I
hope to submit a GLP report regarding the pH by the end of March. All remaining
issues are due to the profound confusion of the reviewer. Please note that in the Conclusions on page 5 of the confidential review, under paragraph
1b, not one sentence is factually correct.

The a.i. on the label does not contradict the CSF. The starting material in the formulation is fomesafen (not the salt). The formulation
process
[redacted] Therefore the active ingredient in the formulation is fomesafen-sodium.

Regards.

Robert Hawk

-----Original Message-----
From: Walsh.Michael@epamail.epa.gov [
mailto:Walsh.Michael@epamail.epa.gov]
Sent: Thursday, March 03, 2011 6:23 AM
To: Robert Hawk
Subject: 87655-E. Chemistry Workgroup Review.

Dear Mr. Hawk:

Thank you for your response.

With regard to the CSF, the first box in column 10 contradicts the first box in column 12.

The Active Ingredient statement on the label contradicts the CSF.

The data you provided indicates the pH is 5.22. The CSF pH is more than 5.22. The data does not match the CSF.

Please also note that your chemistry package will be presented to the Chemistry Workgroup later this morning.

I will be in touch shortly.

Michael Walsh, Tel: 703-308-2972
Registration Division, Herbicide Branch
Office of Pesticide Programs
U.S. EPA

From: "Robert Hawk" <zaphawk@aol.com>
To: Michael Walsh/DC/USEPA/US@EPA
Date: 03/01/2011 03:44 PM
Subject: RE: 87655-E. Product Chemistry Review.

Dear Mr. Walsh,

Thank you again. I believe that this can be handled rather simply. Dr. Mathur is unfortunately laboring under some misconceptions, which I tried to explain to him on February 4. Apparently I was unsuccessful. For your information I have attached the e-mail I sent to him.

To summarize:

1. The active ingredient used in the formulating process is fomesafen (not the sodium salt).

[redacted]

3. Therefore, the active ingredient in the formulation is fomesafen-sodium. The label also gives the equivalent in terms of fomesafen.

The new issues that Dr. Mathur did not discuss with me were as follows:

1. The pH of the formulation (the CSF is correct).

2. The formulation process: fomesafen vs. fomesafen-sodium (the manufacturing process description is correct).

3. The need for [redacted] in the process (it is required for reasons that I have already described to Dr. Mathur).

I will send you a formal response to this review within a few days. May I ask, however, if it is possible to have my response reviewed by a chemist other than Dr. Mathur?

Thanks again and regards.

Robert Hawk

(sent to Dr. Mathur on Feb. 4):

Dear Dr. Mathur,

Thank you for your call today. I apologize for the errors on the CSF. Corrected CSFs are attached. I have also made a minor correction on percentages.

The label guarantees 22.8% fomesafen-sodium, [redacted].

The CSF correctly indicates that the active ingredient in the formulation is fomesafen (CAS No. 72178-02-0). The Syngenta label for fomesafen technical even lists the CAS number on the label. Our manufacturing process, step

[redacted]

Thanks again and best regards.

Bob

Robert Hawk
Registration Manager
Source Dynamics LLC
928-342-3489
rhawk@solerasd.com

-----Original Message-----
From: Walsh.Michael@epamail.epa.gov [
mailto:Walsh.Michael@epamail.epa.gov)
Sent: Tuesday, March 01, 2011 12:51 PM
To: Robert Hawk
Subject: 87655-E. Product Chemistry Review.

Dear Mr. Hawk:

Attached is the product chemistry review.

Many thanks for your prompt attention to this matter.

Michael Walsh, Tel: 703-308-2972
Registration Division, Herbicide Branch
Office of Pesticide Programs
U.S. EPA (See attached file: [Untitled].pdf)

From: "Robert Hawk" <zaphawk@aol.com>

To: Michael Walsh/DC/USEPA/US@EPA
Date: 03/01/2011 02:39 PM
Subject: RE: 87655-E, Fomesafen 2 SL Herbicide. Chemistry Deficiencies

Dear Mr. Walsh,

Thank you for your e-mail. Please e-mail me the confidential product chemistry review. May I ask to defer the PRIA renegotiation until we have reviewed the confidential information?

Regards,

Robert Hawk

-----Original Message-----
From: Walsh.Michael@epamail.epa.gov [
mailto:Walsh.Michael@epamail.epa.gov]
Sent: Tuesday, March 01, 2011 12:00 PM
To: zaphawk@aol.com
Subject: 87655-E, Fomesafen 2 SL Herbicide. Chemistry Deficiencies

Dear Mr. Hawk:

I am currently processing your application for the registration of 87655-E. Attached please find a 75 day letter citing chemistry deficiencies cited by our Technical Review Branch. Since the chemistry review may contain confidential information, I will need your permission/consent/approval to send it to you via email. Please let me know if you would like the chemistry review emailed to you.

The March 9 PRIA due date for this action has to be renegotiated. Please note that the new due date will be 90 days after you submit all of the information outlined in the attached letter. Please let me know when you will be able to provide the information to us, and how you would like to proceed with the renegotiation.

Thank you for your prompt attention to this matter.

Michael Walsh, Tel: 703-308-2972
Registration Division, Herbicide Branch
Office of Pesticide Programs
U.S. EPA

[See attached file: [Untitled].pdf]

[attachment "Fomesafen Certification.pdf" deleted by Michael Walsh/DC/USEPA/US]

484556-00

April 13, 2011

Document Processing Desk (APPL)
Office of Pesticide Programs (P7504C)
Environmental Protection Agency
Room S-4900, One Potomac Yard (South Building)
2777 S. Crystal Drive
Arlington, VA 22202

Attn: Kathryn Montague (PM 23), Registration Division

Dear Ms. Montague:

Subject: Fomesafen 2 SL Herbicide (87655-E): Response to EPA Decision No. 441198

The Agency's letter of March 1, 2011 transmitted the Technical Review Branch evaluation of February 23, 2011. Orion Fomes, LLC here responds to that review. Please find enclosed two documents (three copies each), a Data Transmittal Form and a revised Data Matrix that reflects new information in one of these documents.

We look forward to a prompt review of this submission and a resolution of the Agency's conclusion of deficiencies. The issues involved are not complicated.

Please contact me if you have any questions.

Sincerely,

Robert Hawk
Source Dynamics LLC
Agent for Orion Fomes, LLC

DATA TRANSMITTAL DOCUMENT

Name and Address of Submitter
Orion Fomes, LLC
P. O. Box 21720
Mesa, AZ 85277

Regulatory Action in Support of Which This Package is Submitted
Fomesafen 2 SL Herbicide, EPA File Symbol 87655-E: Response to EPA Decision No. 441198

Transmittal Date
April 13, 2011

List of Submitted Studies (3 Copies)

48455601 R. Hawk, "Fomesafen 2 SC Herbicide: Response to EPA Decision 441198," Report OF1103 (April 4, 2011), 39 pages, OPPTS 830.1550, 830.1600, 830.1650, 830.1670 and 830.7000

48455602 J. Zitomer, "Fomesafen Sodium Salt, 22.8% Contact Broadleaf Herbicide, Group B: Physical Properties Test Guidelines – Color, Physical State, Odor, Flammability (Flashpoint), pH, Viscosity and Density," Report R11-2 (April 1, 22011), 16 pages, OPPTS 830.6302, 830.6303, 830.6304, 830.6315, 830.7000, 830.7100 and 830.7300

Company Official: Robert Hawk, Agent Signature: _____
Company Name: Orion Fomes, LLC
Company Contact: Robert Hawk
zaphawk@aol.com
telephone (928) 942-3489

Form Approved OMB No. 2070-0060 **UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 401 M Street, S.W. WASHINGTON, D.C. 20460**

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration activities and 0.25 hours per response for reregistration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

DATA MATRIX

Date 4/13/2011	EPA Reg. No./File Symbol 87655-E	Page 1 of 4
Applicant's/Registrant's Name & Address Orion Fomes, LLC P. O. Box 21720 Mesa, AZ 85277	Product Fomesafen 2 SL Herbicide	

Ingredient fomesafen

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
			Orion Fomes, LLC	OWN	
			Orion Fomes, LLC	OWN	
			Orion Fomes, LLC	OWN	
			Orion Fomes, LLC	OWN	
			not applicable; not an MUP		
			Orion Fomes, LLC	OWN	
			Orion Fomes, LLC	OWN	
			Orion Fomes, LLC	OWN	
			Orion Fomes, LLC	OWN	
			Orion Fomes, LLC	OWN	
			not applicable; not an MUP		
			Sharda Worldwide Exports Pvt., Ltd.	PAY	
			Orion Fomes, LLC	OWN	

Signature	Name and Title:	Date: 4/13/2011
Robert Hawk	Robert Hawk, Agent, Orion Fomes, LLC	

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DATA MATRIX

Date 4/13/2011	EPA Reg. No./File Symbol 87655-E	Page 2 of 4
Applicant's/Registrant's Name & Address Orion Fomes, LLC P. O. Box 21720 Mesa, AZ 85277	Product Fomesafen 2 SL Herbicide	

Ingredient fomesafen

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
			not applicable; not potentially explosive		
			Sharda USA LLC	PAY	
			not applicable; not an emulsifiable liquid		
			Sharda USA LLC	PAY	
			not applicable; not intended for indoor use		
			Orion Fomes, LLC	OWN	
			Sharda Worldwide Exports Pvt., Ltd.	PAY	
			Orion Fomes, LLC	OWN	
			not applicabibte; not a solid	PAY	
			not applicable; not an MUP		
			Orion Fomes, LLC	OWN	
			Sharda Worldwide Exports Pvt., Ltd.	PAY	
			Sharda Worldwide Exports Pvt., Ltd.	PAY	

Signature	Name and Title:	Date: 4/13/2011
Robert Hawk	Robert Hawk, Agent, Orion Fomes, LLC	

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DATA MATRIX

Date 4/13/2011	EPA Reg. No./File Symbol 87655-E	Page 3 of 4
Applicant's/Registrant's Name & Address Orion Fomes, LLC P. O. Box 21720 Mesa, AZ 85277	Product Fomesafen 2 SL Herbicide	

Ingredient fomesafen

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
			Sharda Worldwide Exports Pvt., Ltd.	PAY	
			Sharda Worldwide Exports Pvt., Ltd.	PAY	
			Syngenta Crop Protection, Inc.	PAY	
			Syngenta Crop Protection	PAY	
			Syngenta Crop Protection	PAY	
			Syngenta Crop Protection	PAY	
			Syngenta Crop Protection	PAY	
			Syngenta Crop Protection	PAY	

Signature	Name and Title:	Date: 4/13/2011
Robert Hawk	Robert Hawk, Agent, Orion Fomes, LLC	

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DATA MATRIX

Date 4/13/2011	EPA Reg. No./File Symbol 87655-E	Page 4 of 4
Applicant's/Registrant's Name & Address Orion Fomes, LLC P. O. Box 21720 Mesa, AZ 85277	Product Fomesafen 2 SL Herbicide	

Ingredient fomesafen

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
			Syngenta Crop Protection, Inc.	PAY	
			Spray Drift Task Force	PAY	
			Cheminova, Inc.	PAY	
			Outdoor Residential Exposure Task Force	PAY	
			Agricultural Reentry Task Force	PAY	
			FIFRA Endangered Species Task Force	PAY	
			Agricultural Handlers Exposure Task Force	PAY	
			Sharda Worldwide Exports Pvt., Ltd	PAY	
			Sharda USA LLC	PAY	

Signature	Name and Title:	Date:
Robert Hawk	Robert Hawk, Agent, Orion Fomes, LLC	Date: 4/13/2011

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DATA MATRIX

Date 4/ t3/2011	EPA Reg. No./File Symbol 87655-E	Page f of 4
Applicant's/Registrant's Name & Address Orion Fomes, LLC P. O. Box 21720 Mesa, AZ 85277	Product Fomesafen 2 SL Herbicide	

Ingredient fomesafen

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
830. f550	product identification and disclosure of ingredients	48265601	Orion Fomes, LLC	OWN	
830.1600	description of beginning materials	4826560 f	Orion Fomes, LLC	OWN	
830.1620	description of manufacturing process	4826560 f	Orion Fomes, LLC	OWN	
830. t670	discussion of formation of impurities	4826560 f	Orion Fomes, LLC	OWN	
830. f700	preliminary analysis		not applicable; not an MUP		
830.1750	certification of limits	48265601	Orion Fomes, LLC	OWN	
830. f800	enforcement analytical method	48265602	Orion Fomes, LLC	OWN	
830.6302	color	NEW	Orion Fomes, LLC	OWN	
830.6303	physical state	NEW	Orion Fomes, LLC	OWN	
830.6304	odor	NEW	Orion Fomes, LLC	OWN	
830.6313	stability to normal and elevated temperatures		not applicable; not an MUP		
830.6314	oxidation / reduction: chemical incompatibility	47549301	Sharda Worldwide Exports Pvt., Ltd.	PAY	
830.63 f5	flammability	NEW	Orion Fomes, LLC	OWN	

Signature	Name and Tille: Robert Hawk, Agent, Orion Fomes, LLC	Date: 4/t3/20t t

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DATA MATRIX

Date 4/13/2011	EPA Reg. No./File Symbol 87655-E	Page 2 of 4
Applicant's/Registrant's Name & Address Orion Fomes, LLC P. O. Box 21720 Mesa, AZ 85277	Product Fomesafen 2 SL Herbicide	

Ingredient fomesafen

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
830.6316	explodability		not applicable; not potentially explosive		
830.6317	storage stability	47900501	Sharda USA LLC	PAY	in progress
630.6319	miscibility		not applicable; not an emulsifiable liquid		
830.6320	corrosion characteristics	47900501	Sharda USA LLC	PAY	in progress
830.6321	dielectric breakdown voltage		not applicable; not intended for indoor use		
830.7000	pH	NEW	Orion Fomes, LLC	OWN	
830.7050	UV / visible absorption	47409105	Sharda Worldwide Exports Pvt., Ltd.	PAY	
830.7100	viscosity	NEW	Orion Fomes, LLC	OWN	
830.7200	melting point		not applicabible; not a solid	PAY	
830.7220	boiling point		not applicable; not an MUP		
830.7300	density / relative density	NEW	Orion Fomes, LLC	OWN	
830.7370	dissociation constant in water	47409105	Sharda Worldwide Exports Pvt., Ltd.	PAY	
830.7570	octanol / water partition coefficient	47409105	Sharda Worldwide Exports Pvt., Ltd.	PAY	

Signature	Name and Title:	Date: 4/13/2011
Robert Hawk	Robert Hawk, Agent, Orion Fomes, LLC	

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DATA MATRIX

Date 4/13/2011	EPA Reg. No./File Symbol 87655-E	Page 3 of 4
Applicant's/Registrant's Name & Address Orion Fomes, LLC P. O. Box 21720 Mesa, AZ 85277	Product Fomesafen 2 SL Herbicide	

Ingredient fomesafen

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
830.7840	water solubility	47409105	Sharda Worldwide Exports Pvt., Ltd.	PAY	
830.7860	water solubility	see 830.7840			
830.7950	vapor pressure	47409105	Sharda Worldwide Exports Pvt., Ltd.	PAY	
870.1100	acute oral toxicity	47482503	Cheminova, Inc.	PAY	
870.1200	acute dermal toxicity	47482504	Cheminova, Inc.	PAY	
870.1300	acute inhalation toxicity	47482505	Cheminova, Inc.	PAY	
870.2400	acute eye irritation	47482506	Cheminova, Inc.	PAY	
870.2500	acute dermal irritation	47482507	Cheminova, Inc.	PAY	
870.2600	skin sensitization	47482508	Cheminova, Inc.	PAY	

Signature	Name and Title:	Date:
Robert Hawk	Robert Hawk, Agent, Orion Fomes, LLC	Date: 4/13/2011

Form Approved OMB No. 2070-0060 **UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 401 M Street, S.W. WASHINGTON, D.C. 20460**

DATA MATRIX

Date 4/13/2011	EPA Reg. No./File Symbol 87655-E	Page 4 of 4
Applicant's/Registrant's Name & Address Orion Fomes, LLC P. O. Box 21720 Mesa, AZ 85277	Product Fomesafen 2 SL Herbicide	

Ingredient fomesafen

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
			Syngenta Crop Protection, Inc.	PAY	
			Spray Drift Task Force	PAY	
			Cheminova, Inc.	PAY	
			Outdoor Residential Exposure Task Force	PAY	
Series 875: cite-all	Toxicology: generic data		Agricultural Reentry Task Force	PAY	
Series 810: cite-all	Product Performance: generic data		FIFRA Endangered Species Task Force	PAY	
Series 835: cite-all	Fate, Transport and Transformation: generic data		Agricultural Handlers Exposure Task Force	PAY	
Series 840: cite-all	Spray Drift: generic data	multiple	Sharda Worldwide Exports Pvt., Ltd	PAY	
Series 850: cite-all	Ecological Effects: generic data		Sharda USA LLC	PAY	
Series 860: cite-all	Residue Chemistry: generic data				
Series 875: cite-all	Occupational and Residential Exposure: generic data				

Signature	Name and Title:	Date: 4/13/2011
Robert Hawk	Robert Hawk, Agent, Orion Fomes, LLC	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

April 20, 2011

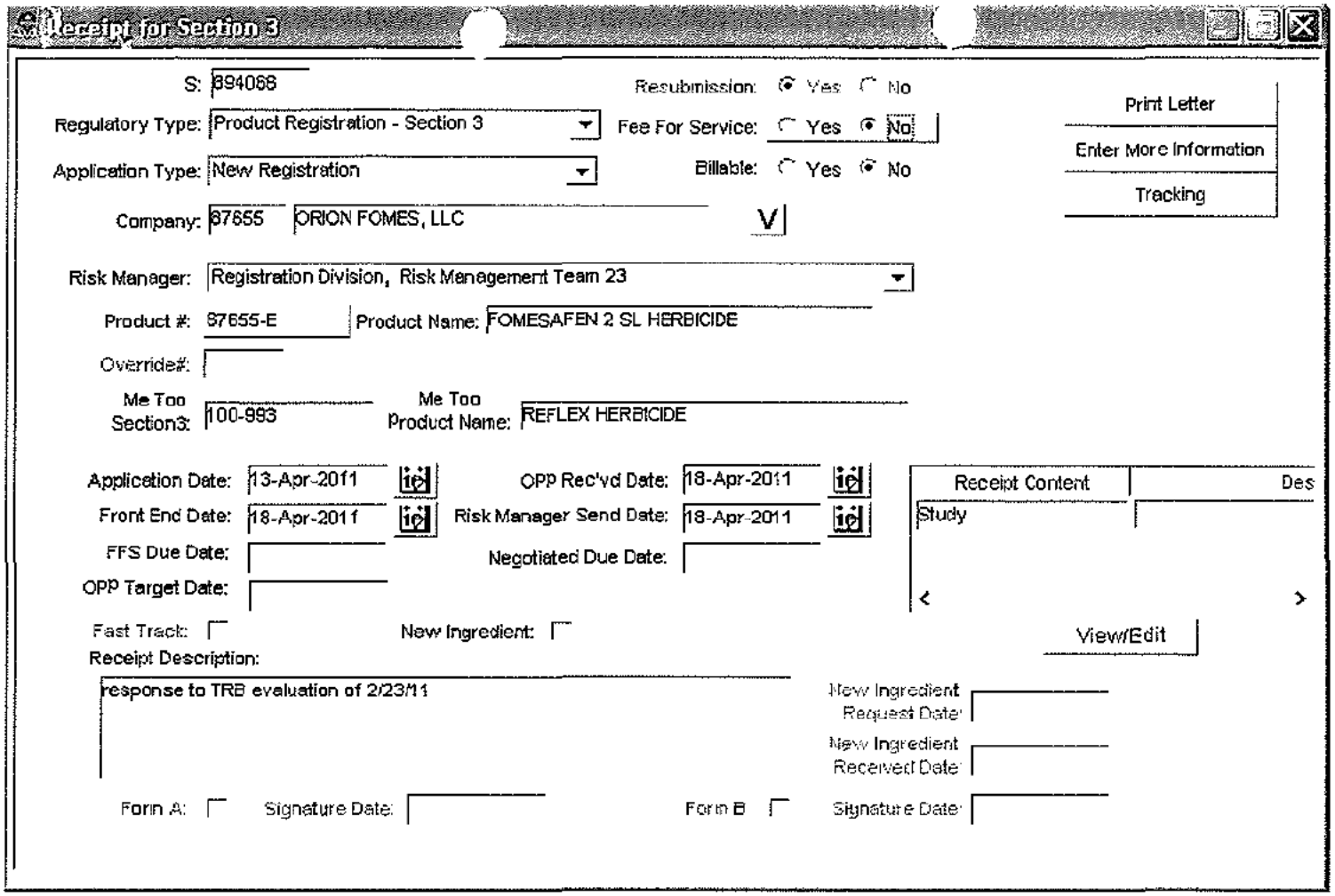
OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES.

ROBERT E. HAWK
SOURCE DYNAMICS LLC
ORION FOMES, LLC
12230 EAST DEL NORTE
YUMA, AZ 85367-7355

Report of Analysis for Compliance with PR Notice 86-5

Thank you for your submittal of 18-APR-11. Our staff has completed a preliminary analysis of the material. The results are provided as follows:

Your submittal was found to be in full compliance with the standards for submission of data contained in PR Notice 86-5. A copy of your bibliography is enclosed, annotated with Master Record ID's (MRIDs) assigned to each document submitted. Please use these numbers in all future references to these documents. Thank you for your cooperation. If you have any questions concerning this data submission, please raise them with the cognizant Product Manager, to whom the data have been released.


Receipt for Section 3
S: 894068
Resubmission: Yes No
Regulatory Type: Product Registration - Section 3
Fee For Service: Yes No
Application Type: New Registration
Billable: Yes No
Print Letter
Enter More Information
Tracking
Company: 87655 ORION FOMES, LLC
Risk Manager: Registration Division, Risk Management Team 23
Product #: 87655-E
Product Name: FOMESAFEN 2 SL HERBICIDE
Override#:
Me Too Section3: 100-993
Me Too Product Name: REFLEX HERBICIDE
Application Date: 13-Apr-2011
OPP Rec'vd Date: 18-Apr-2011
Front End Date: 18-Apr-2011
Risk Manager Send Date: 18-Apr-2011
FFS Due Date:
Negotiated Due Date:
OPP Target Date:
Receipt Content
Des
Study
Fast Track:
New Ingredient:
View/Edit
Receipt Description:
response to TRB evaluation of 2/23/11
New Ingredient Request Date:
New Ingredient Received Date:
Form A:
Signature Date:
Form B
Signature Date:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Mr. Robert Hawk
Registration Agent
Orion Fomes, LLC
P.O. Box 21720
Mesa, AZ 85277

MAR - 1 2011

Subject: New Product Registration – Application Deficiencies
Product: Fomesafen 2 SL Herbicide
EPA File Symbol: 87655-E
Submission Date: October 14, 2010
EPA Decision Number: 441198

Dear Mr. Hawk:

The application referred to above has been determined, pursuant to 40 CFR 152.105, not to be sufficiently complete to process; therefore, the application is considered deficient. The items specified below must be addressed before processing of the application can be completed. If such deficiencies cannot be corrected within 75 days from the date of this letter, you must notify the Agency within those 75 days of the date you expect to complete the application. If, after 75 days, you do not respond, or you subsequently fail to complete the application within the scheduled times of completion, the Agency will terminate any action on the application, and will treat the application as if it has been withdrawn by you. As you see fit, you may also withdraw the registration application.

Please note that the PRIA due date for this product (March 9, 2011) is less than 75 days from today. This means that the PRIA due date must be renegotiated with you.

Enclosed please find the product Chemistry Review which outlines in detail the data deficiencies. The following must be addressed:

- The proposed basic and alternate CSFs are not acceptable.
  - The pH values given in the data does not agree with the pH value given in the CSFs. The registrant must clarify which one is the correct value of the pH for the product and correct the CSF accordingly
  - The name of the active ingredient given in the CSFs does not concur with the name of the AI given on the product label.
- The product chemistry data corresponding to guidelines 830.1600 (description of materials used to produce the product), 830.1650 (description of formulation process), and 830.1670 (discussion on the formation, and 830.1750 (certified limits) are not acceptable).
- The registrant is required to submit MSDS of the source product of the active ingredient used in the formulation.

SEE NEXT PAGE

- The formulation process needs to be revised if the application is planning to use the active ingredient with 87655-R as the source.
- The pH (830.7000) value reported on the CSF does not concur with the value provided in MRID 475493-01. The registrant is required to correct the value of the pH. This data needs to be upgraded.

If you have any questions regarding these comments or the PRIA due date, please feel free to contact Mike Walsh at 1-703-308-2972 or via email at "walsh.michael@epa.gov".

Sincerely,

Kathryn V. Montague
Product Manager (23)
Herbicide Branch
Registration Division (7505P)

Print Form

Please read instructions on reverse befor[illegible] ...pleting form. Form Ap[illegible] ...ed. OMB No. 2070-0060. Approval expires 2-28

EPA

United States
Environmental Protection Agency
Washington, DC 20460

[X] **Registration**
[ ] **Amendment**
[ ] **Other**

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number	2. EPA Product Manager	3. Proposed Classification
87655-x E	K. Montague	[ ] None [X] Restricte
4. Company/Product (Name)	**PM#**	
Fomesafen 2 SL Herbicide	23	

5. Name and Address of Applicant *(Include ZIP Code)*

Orion Fomes, LLC
P.O. Box 21720
Mesa, AZ 85277

[X] *Check if this is a new address*

6. Expedited Reveiw. In accordance with FIFRA Section 3(c)(3)(b)(i), my product is similar or identical in composition and labeling to:

EPA Reg. No. 100-993

Product Name Reflex Herbicide

Section - II

[ ] Amendment - Explain below.
[ ] Resubmission in response to Agency letter detad _____
[ ] Notification - Explain below.
[ ] Final printed labels in repsonse to Agency letter dated _____
[ ] "Me Too" Application.
[X] Other - Explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

This is a registration application for a new end-use product that is substantially similar to other registered products.

Section - III

1. Meterial This Product Will Be Packaged In:

Child-Resistant Packaging	Unit Packaging	Water Soluble Packaging	2. Type of Container
[ ] Yes [X] No	[ ] Yes [X] No	[ ] Yes [ ] Text No	[ ] Metal [X] Plastic [ ] Glass [ ] Paper [ ] Other (Specify)
* *Certification must be submitted*	If "Yes" Unit Packaging wgt. / No. per container	If "Yes" Package wgt / No. per container	

3. Location of Net Contents Information
[X] Label [ ] Container

4. Size(s) Retail Container
2.5 gal

5. Location of Label Directions
[ ] On Label
[X] On Labeling accompaning product

6. Manner in Which Label is Affixed to Product
[ ] Lithograph
[ ] Paper glued
[ ] Stenciled
[X] Other plastic sleeve

Section - IV

1. Contact Point *(Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)*

Name	Title	Telephone No. (Include Area Code)
Robert Hawk	Agent	928-342-3489

Certification

I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowlingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

6. Date Application Received
(Stamped)

2. Signature	3. Title	4. Typed Name	5. Date
Robert Hawk	Agent	Robert Hawk	10/14/2010

EPA Form 8570-1 (Rev. 3-94) Previous editions are obsolete White - EPA File Copy (original) Yellow - Applicant Co

October 14, 2010

Document Processing Desk (APPL)
Office of Pesticide Programs (P7504C)
Environmental Protection Agency
Room S-4900, One Potomac Yard (South Building)
2777 S. Crystal Drive
Arlington, VA 22202

Attn: Kathryn Montague (PM 23), Registration Division

Dear Ms. Montague:

Subject: Fomesafen 2 SL Herbicide (87655-x): Registration Application

Orion Fomes, LLC wishes to apply for the registration of a new end-use product, Fomesafen 2 SL Herbicide. In support of this application we have enclosed the following:

Application for Pesticide Registration (8570-1)
Confidential Statement of Formula (8570-4)
Formulator's Exemption (8570-27)
Certification with Respect to Citation of Data (8570-34)
Data Matrix (8570-35)
Summary of Physical/Chemical Properties (8570-36)
Self-Certification Statement (8570-37)
Proposed label (6 copies)
Supporting studies (3 copies, with Data Transmittal Document)

One of the sources of technical material in this formulation is not registered at this time. However, we anticipate that it will be registered well before the PRIA approval date for this registration application.

We have concluded that this regulatory action falls in PRIA II Category R301, for which a fee of $1,720 is required. Please find proof of payment enclosed.

Please contact me if you have any questions.

Sincerely,

Robert Hawk

Robert Hawk
Source Dynamics LLC
Agent for Orion Fomes, LLC

DATA TRANSMITTAL DOCUMENT

Name and Address of Submitter
Orion Fomes, LLC
P. O. Box 21720
Mesa, AZ 85277

Regulatory Action in Support of Which This Package is Submitted
Application for Pesticide Registration
Fomesafen 2 SL Herbicide, EPA File Symbol 87655-x

Transmittal Date
October 14, 2010

List of Submitted Studies (3 Copies)

48265601 R. Hawk, "Fomesafen 2 SC Herbicide: Product Identity, Description of Materials, Manufacturing Process, Discussion of Impurities and Certification of Limits," Report SD1009C (September 15, 2010), 40 pages, OPPTS 830.1550, 830.1600, 830.1620, 830.1670 and 830.1750

48265602 Z. Wang, "Analysis of Fomesafen Soluble Concentrate Formulations: Enforcement Analytical Method," Report QH101001 (September 30, 2010), 10 pages, OPPTS 830.1800

Company Official: Robert Hawk, Agent Signature: Robert Hawk
Company Name: Orion Fomes, LLC
Company Contact: Robert Hawk
zaphawk@aol.com
telephone (928) 942-3489

Form Approved. OMB Nos. 2070-0060; 2070-0057; 2070-0107

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
1200 Pennsylvania Avenue, N.W.
WASHINGTON, D.C. 20460

SELF-CERTIFICATION STATEMENT FOR THE PHYSICAL/CHEMICAL PROPERTIES (PR NOTICE 98-1)

Product Name: Fomesafen 2 SL Herbicide

Reg. No./File Symbol No.
(if known) or Company No. 87655-x

SELF-CERTIFICATION STATEMENT:

I certify that the reported information on the "Summary Form" represents a true and accurate record of the test results of studies generated or owned by (Company Name): Sharda Worldwide Exports Pvt., Ltd., Sharda USA, LLC and that the values of the properties reported are reliable. I further certify that such data were generated in substantial conformity with OPPTS Test Guideline Series 830 Product Properties, applicable to my product, and in effect at the time of submission.

As a condition of registration, EPA may, by order, (1) withdraw a pending registration, (2) suspend the registration of this product without opportunity for hearing, or (3) assess civil penalties provided for in section 14 of FIFRA for violations of section 12(a)(2)(N) of FIFRA without opportunity for hearing, if I have not submitted to EPA within thirty (30) days of receipt of a request by the Agency, or within a specified time agreed to by the Agency, test results of studies summarized in the "Summary Form."

As a condition of registration, EPA may, by order, (1) withdraw a pending registration, (2) suspend the registration of this product without opportunity for hearing, or (3) assess civil penalties provided for in section 14 of FIFRA for violations of sections 12(a)(2)(N), 12(a)(2)(Q), or 12(a)(2)(R) of FIFRA without opportunity for hearing, if I fail to provide to EPA within thirty (30) days of receipt of a notification of error, or within a specified time agreed to by the Agency, information that EPA determines is required to correct the error.

Type Applicant's Name: Robert Hawk

Title: Agent	Telephone No. 928-342-3489
Applicant's Signature: Robert Hawk	Date: 10/14/2010

EPA Form 8570-37 (12-2003)

Attach-2

Print Form

Form Approved OMB No. 2070-0060

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
401 M Street, S.W.
WASHINGTON, D.C. 20460

SUMMARY OF THE PHYSICAL/CHEMICAL PROPERTIES (PR Notice 98-1)

1. PRODUCT NAME: Fomesafen 2 SL Herbicide		2. Reg. No. 87655-x
3. COMPANY NAME: Orion Fomes, LLC		4. SUBMISSION DATE: Sept. 16, 2010
5. FIRST SUBMISSION [X] 6. RESUBMISSION [ ]	7. PESTICIDE TYPE: herbicide	10. REGISTRATION [X]
8. FORMULATED MANUFACTURING-USE PRODUCT [X] or 9. END-USE PRODUCT [ ]		11. REREGISTRATION [ ]
13. PRODUCT MANAGER OR CHEMICAL REVIEW MANAGER #/NAME (IF KNOWN): K. Montague (23)		12. REREG CASE #

14. GUIDELINE REFERENCE NO.(GRN)/TITLE	15. VALUE or QUALITATIVE DESCRIPTION/METHOD(s) USED WHERE APPLICABLE AND REFERENCES	16. MRID or REPORT NO.
Group B, Series 830-Physical and Chemical Properties (40 CFR 158.190)		
-6302 Color	amber (visual)	47549301
-6303 Physical State	liquid (visual)	47549301
-6304 Odor	virtually odorless (sensory)	47549301
-6314 Oxidation/Reduction: Chemical Incompatibility	avoid exposure to acids	47549301
-6315 Flammability/Flame Extension	not applicable; not a combustible liquid	
-6316 Explodability	not applicable; not subject to thermal or impact explodability	
-6317 Storage Stability	stable >1 year (by chemical analysis)	47900501
-6319 Miscibility	not applicable; not intended for dilution in organic solvents	
-6320 Corrosion Characteristics	not corrosive to its packaging in 1 year (visual and gravimetric)	47900501
-6321 Dielectric Breakdown Voltage	not applicable; not intended for household use	
-7000 pH	5.2 (pH probe)	47549301
-7100 Viscosity	5 - 10 cps (viscosimeter)	47549301
-7300 Density/Relative Density/ Bulk Density	1.11 g/ml (gravimetric)	47549301

EPA Form 8570-36 (07/JAN/1998)

Form approved. OMB No. 2070-0060, 2070-00[illegible] 70-0107, 2070-0122, 2070-0164.

EPA

United States
Environmental Protection Agency
Washington, DC 20460

Formulator's Exemption Statement

(40 CFR 152.85)

Applicant's Name and Address	EPA File Symbol/Registration Number
Orion Fomes, LLC P. O. Box 21720 Mesa, AZ 85277	87655-x
	Product Name Fomesafen 2 SL Herbicide
	Date of Confidential Statement of Formula *(EPA Form 8570-4)* 10/14/2010

As an authorized representative of the applicant for registration of the product identified above, I certify that:

(1) This product contains the following active ingredient(s):

fomesafen

(2) Of these, each active ingredient listed in paragraph (4) is present solely as the result of the use of that active ingredient in the manufacturing, formulation or repackaging another product which contains that active ingredient which is registered under FIFRA Section 3, is purchased by us from another person and meets the requirements of 40 CFR section 158.50(e)(2) or (3).

(3) Indicate by checking (A) or (B) below which paragraph applies:

☑ (A) An accurate Confidential Statement of Formula *(EPA FORM 8570-4)* for the above identified product is attached to this statement. That formula statement indicates, by company name, registration number, and product name, the source of the active ingredient(s) listed in paragraph (1).

OR

☐ (B) The Confidential Statement of Formula (CSF)(EPA Form 8570-4) referenced above and on file with the EPA is complete, current, an accurate and contains the information required on the current CSF.

(4) The following active ingredients in this product qualify for the formulator's exemption.

Source

Active Ingredient	Product Name	Registration Number
fomesafen	[redacted]	[redacted]

Product ingredient source information may be entitled to confidential treatment

Signature	Name and Title	Date
Robert Hawk	Robert Hawk, Agent	10/14/2010

EPA Form 8570-27 (Rev. 06-2004)

Copy 1 – EPA
Copy 2 - Applicant copy

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 1200 Pennsylvania Avenue, N.W. WASHINGTON, D.C. 20460

Certification with Respect to Citation of Data

Applicant's/Registrant's Name, Address, and Telephone Number	EPA Registration Number/File Symbol
Orion Fomes, LLC P. O. Box 21720 Mesa, AZ 85277	87655-x
Active Ingredient(s) and/or representative test compound(s) fomesafen	Date 10/14/2010
General Use Pattern(s) (list all those claimed for this product using 40 CFR Part 158) terrestrial crop use	Product Name Fomesafen 2 SL Herbicide

NOTE: If your product is a 100% repackaging of another purchased EPA-registered product labeled for all the same uses on your label, you do not need to submit this form. You must submit the Formulator's Exemption Statement (EPA Form 8570-27).

I am responding to a Data-Call-In Notice, and have included with this form a list of companies sent offers of compensation (the Data Matrix form should be used for this purpose). ☐

SECTION I: METHOD OF DATA SUPPORT (Check one method only)

I am using the cite-all method of support, and have included with this form a list of companies sent offers of compensation (the Data Matrix form should be used for this purpose). ☐	I am using the selective method of support (or cite-all option under the selective method), and have included with this form a completed list of data requirements (the Data Matrix form must be used). ☒

SECTION II: GENERAL OFFER TO PAY

[Required if using the cite-all method or when using the cite-all option under the selective method to satisfy one or more data requirements] I hereby offer and agree to pay compensation, to other persons, with regard to the approval of this application, to the extent required by FIFRA. ☒

SECTION III: CERTIFICATION

I certify that this application for registration, this form for reregistration, or this Data-Call-In response is supported by all data submitted or cited in the application for registration, the form for reregistration, or the Data-Call-In response. In addition, if the cite-all option or cite-all option under the selective method is indicated in Section I, this application is supported by all data in the Agency's files that (1) concern the properties or effects of this product or an identical or substantially similar product, or one or more of the ingredients in this product; and (2) is a type of data that would be required to be submitted under the data requirements in effect on the date of approval of this application if the application sought the initial registration of a product of identical or similar composition and uses .

I certify that for each exclusive use study cited in support of this registration or reregistration, that I am the original data submitter or that I have obtained the written permission of the original data submitter to cite that study.

I certify that for each study cited in support of this registration or reregistration that is not an exclusive use study, either: (a) I am the original data submitter; (b) I have obtained the permission of the original data submitter to use the study in support of this application; (c) all periods of eligibility for compensation have expired for the study; (d) the study is in the public literature; or (e) I have notified in writing the company that submitted the study and have offered (i) to pay compensation to the extent required by sections 3(c)(1)(F) and/or 3(c)(2)(B) of FIFRA; and (ii) to commence negotiations to determine the amount and terms of compensation, if any, to be paid for the use of the study.

I certify that in all instances where an offer of compensation is required, copies of all offers to pay compensation and evidence of their delivery in accordance with sections 3(c)(1)(F) and/or 3(c)(2)(B) of FIFRA are available and will be submitted to the Agency upon request. Should I fail to produce such evidence to the Agency upon request, I understand that the Agency may initiate action to deny, cancel or suspend the registration of my product in conformity with FIFRA.

I certify that the statements I have made on this form and all attachments to it are true, accurate, and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

Signature	Date	Typed or Printed Name and Title
Robert Hawk	10/14/2010	Robert Hawk, Agent

Form Approved OMB Nos. 2070-0060; 2070-0057; 2070-0107; 2070-0122; 2070-0164

Form Approved OMB No. 2070-0060 **UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 401 M Street, S.W. WASHINGTON, D.C. 20460**

DATA MATRIX

Date 9/16/2010	EPA Reg. No./File Symbol 87655-x	Page 1 of 4
Applicant's/Registrant's Name & Address Orion Fomes, LLC P. O. Box 21720 Mesa, AZ 85277	Product Fomesafen 2 SL Herbicide	

Ingredient fomesafen

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
830.1550	product identification and disclosure of ingredients	NEW	Orion Fomes, LLC	OWN	
830.1600	description of beginning materials	NEW	Orion Fomes, LLC	OWN	
830.1620	description of manufacturing process	NEW	Orion Fomes, LLC	OWN	
830.1670	discussion of formation of impurities	NEW	Orion Fomes, LLC	OWN	
830.1700	preliminary analysis		not applicable; not an MUP		
830.1750	certification of limits	NEW	Orion Fomes, LLC	OWN	
830.1800	enforcement analytical method	48109403	Orion Fomes, LLC	OWN	
830.6302	color	47549301	Sharda Worldwide Exports Pvt., Ltd.	PAY	
830.6303	physical state	47549301	Sharda Worldwide Exports Pvt., Ltd.	PAY	
830.6304	odor	4754930 f	Sharda Worldwide Exports Pvt., Ltd.	PAY	
830.63 f3	stability to normal and elevated temperatures		not applicable; not an MUP		
830.6314	oxidation / reduction: chemical incompatibility	47549301	Sharda Worldwide Exports Pvt., Ltd.	PAY	
830.6315	flammability	47477602	Cheminova, Inc.	PAY	

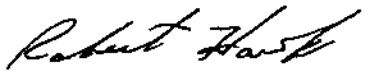
Signature	Name and Title:	Date: 9/16/2010
Robert Hawk	Robert Hawk, Agent, Orion Fomes, LLC	

Form Approved OMB No. 2070-0060 **UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 401 M Street, S.W. WASHINGTON, D.C. 20460**

DATA MATRIX

Date 9/16/20f0	EPA Reg. No./File Symbol 87655-x	Page 2 of 4
Applicant's/Registrant's Name & Address Orion Fomes, LLC P. O. Box 21720 Mesa, AZ 85277	Product Fomesafen 2 SL Herbicide	

Ingredient fomesafen

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
830.6316	explodebility		not applicable; not potentially explosive		
830.63f7	storage stability	47900501	Sharda USA LLC	PAY	in progress
630.6319	miscibility		not applicable; not an emulsifiable liquid		
830.6320	corrosion characteristics	47900501	Sharda USA LLC	PAY	in progress
830.632f	dielectric breakdown voltage		not applicable; not intended for indoor use		
830.7000	pH	47549301	Sharda Worldwide Exports Pvt., Ltd.	PAY	
830.7050	UV / visible absorption	47409f05	Sharda Worldwide Exports Pvt., Ltd.	PAY	
830.7f00	viscosity	4754930f	Sharda Worldwide Exports Pvt., Ltd.		
830.7200	melting point		not applicabible; not a solid	PAY	
830.7220	boiling point		not applicable; not an MUP		
830.7300	density / relative density	47549301	Sharda Worldwide Exports Pvt., Ltd.	PAY	
830.7370	dissociation constant in water	47409f05	Sharda Worldwide Exports Pvt., Ltd.	PAY	
830.7570	octanol / water partition coefficient	47409f05	Sharda Worldwide Exports Pvt., Ltd.	PAY	
Signature 			Name and Title: Robert Hawk, Agent, Orion Fomes, LLC		Date: 9/16/2010

Form Approved OMB No. 2070-0060 **UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 401 M Street, S.W. WASHINGTON, D.C. 20460**

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DATA MATRIX

Date 9/16/2010	EPA Reg. No./File Symbol 87655-x	Page 3 of 4
Applicant's/Registrant's Name & Address Orion Fomes, LLC P. O. Box 21720 Mesa, AZ 85277	Product Fomesafen 2 SL Herbicide	

Ingredient fomesafen

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
830.7840	water solubility	47409105	Sharda Worldwide Exports Pvt., Ltd.	PAY	
830.7860	water solubility	see 830.7840			
830.7950	vapor pressure	47409105	Sharda Worldwide Exports Pvt., Ltd.	PAY	
870.1100	acute oral toxicity	47482503	Cheminova, Inc.	PAY	
870.1200	acute dermal toxicity	47482504	Cheminova, Inc.	PAY	
870.1300	acute inhalation toxicity	47482505	Cheminova, Inc.	PAY	
870.2400	acute eye irritation	47482506	Cheminova, Inc.	PAY	
870.2500	acute dermal irritation	47482507	Cheminova, Inc.	PAY	
870.2600	skin sensitization	47482508	Cheminova, Inc.	PAY	

Signature	Name and Tille: Robert Hawk, Agent, Orion Fomes, LLC	Date: 9/16/2010

Form Approved OMB No. 2070-0060 **UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 401 M Street, S.W. WASHINGTON, D.C. 20460**

DATA MATRIX

Date 9/16/2010	EPA Reg. No./File Symbol 87655-x	Page 4 of 4
Applicant's/Registrant's Name & Address Orion Fomes, LLC P. O. Box 21720 Mesa, AZ 85277	Product Fomesafen 2 SL Herbicide	

Ingredient fomesafen

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
			Syngenta Crop Protection, Inc.	PAY	
			Spray Drift Task Force	PAY	
			Cheminova, Inc.	PAY	
			Outdoor Residential Exposure Task Force	PAY	
Series 875: cite-all	Toxicology: generic data		Agricultural Reentry Task Force	PAY	
Series 810: cite-all	Product Performance: generic data		FIFRA Endangered Species Task Force	PAY	
Series 835: cite-all	Fate, Transport and Transformation: generic data		Agricultural Handlers Exposure Task Force	PAY	
Series 840: cite-all	Spray Drift: generic data	multiple	Sharda Worldwide Exports Pvt., Ltd	PAY	
Series 850: cite-all	Ecological Effects: generic data		Sharda USA LLC	PAY	
Series 860: cite-all	Residue Chemistry: generic data				
Series 875: cite-all	Occupational and Residential Exposure: generic data				

Signature	Name and Title:	Date: 9/16/2010
Robert Hawk	Robert Hawk, Agent, Orion Fomes, LLC	

Form Approved OMB No. 2070-0060 **UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 401 M Street, S.W. WASHINGTON, D.C. 20460**

DATA MATRIX

Date 9/16/2010	EPA Reg. No./File Symbol 87655-x	Page 1 of 4
Applicant's/Registrant's Name & Address Orion Fomes, LLC P. O. Box 21720 Mesa, AZ 85277	Product Fomesafen 2 SL Herbicide	

Ingredient fomesafen

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
			Orion Fomes, LLC	OWN	
			Orion Fomes, LLC	OWN	
			Orion Fomes, LLC	OWN	
			Orion Fomes, LLC	OWN	
			Orion Fomes, LLC	OWN	
			Orion Fomes, LLC	OWN	
			Orion Fomes, LLC	OWN	
			Sharda Worldwide Exports Pvt., Ltd.	PAY	
			Sharda Worldwide Exports Pvt., Ltd.	PAY	
			Sharda Worldwide Exports Pvt., Ltd.	PAY	
			Sharda Worldwide Exports Pvt., Ltd.	PAY	
			Sharda Worldwide Exports Pvt., Ltd.	PAY	
			not applicable; not a combustible liquid		

Signature	Name and Title:	Date: 9/16/2010
Robert Hawk	Robert Hawk, Agent, Orion Fomes, LLC	

Form Approved OMB No. 2070-0060 **UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 401 M Street, S.W. WASHINGTON, D.C. 20460**

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DATA MATRIX

Date 9/16/2010	EPA Reg. No./File Symbol 87655-x	Page 2 of 4
Applicant's/Registrant's Name & Address Orion Fomes, LLC P. O. Box 21720 Mesa, AZ 85277	Product Fomesafen 2 SL Herbicide	

Ingredient fomesafen

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
			not applicable; not potentially explosive		
			Sharda Worldwide Exports Pvt., Ltd.	PAY	
			not applicable; not an emulsifiable liquid		
			Sharda Worldwide Exports Pvt., Ltd.	PAY	
			not applicable; not an end-use product		
			Sharda Worldwide Exports Pvt., Ltd.	PAY	
			Sharda Worldwide Exports Pvt., Ltd.	PAY	
			not applicable; not a liquid		
			Sharda Worldwide Exports Pvt., Ltd.	PAY	
			not applicable; not a liquid at room temperature		
			Sharda Worldwide Exports Pvt., Ltd.	PAY	
			Sharda Worldwide Exports Pvt., Ltd.	PAY	
			Sharda Worldwide Exports Pvt., Ltd.	PAY	

Signature	Name and Title: Robert Hawk, Agent, Orion Fomes, LLC	Date: 9/16/20 t0

Form Approved OMB No. 2070-0060 **UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 401 M Street, S.W. WASHINGTON, D.C. 20460**

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DATA MATRIX

Date 9/16/2010	EPA Reg. No./File Symbol 87655-x	Page 4 of 4
Applicant's/Registrant's Name & Address Orion Fomes, LLC P. O. Box 21720 Mesa, AZ 85277	Product Fomesafen 2 SL Herbicide	

Ingredient fomesafen

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
			Syngenta Crop Protection, Inc.	PAY	
			Spray Drift Task Force	PAY	
			Cheminova, Inc.	PAY	
			Outdoor Residential Exposure Task Force	PAY	
			Agricultural Reentry Task Force	PAY	
			FIFRA Endangered Species Task Force	PAY	
			Agricultural Handlers Exposure Task Force	PAY	
			Sharda Worldwide Exports Pvt., Ltd	PAY	
			Sharda USA LLC	PAY	

Signature	Name and Title:	Date:
Robert Hawk	Robert Hawk, Agent, Orion Fomes, LLC	Date: 9/16/2010

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

October 21, 2010

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

SOURCE DYNAMICS LLC
ORION FOMES, LLC
12230 EAST DEL NORTE
YUMA, AZ 85367-7355

Report of Analysis for Compliance with PR Notice 86-5

Thank you for your submittal of 19-OCT-10. Our staff has completed a preliminary analysis of the material. The results are provided as follows:

Your submittal was found to be in full compliance with the standards for submission of data contained in PR Notice 86-5. A copy of your bibliography is enclosed, annotated with Master Record ID's (MRIDs) assigned to each document submitted. Please use these numbers in all future references to these documents. Thank you for your cooperation. If you have any questions concerning this data submission, please raise them with the cognizant Product Manager, to whom the data have been released.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

October 20, 2010

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

OPP Decision Number: D-441198
EPA File Symbol or Registration Number: 87655-E
Product Name: FOMESAFEN 2 SL HERBICIDE
EPA Receipt Date: 19-Oct-2010
EPA Company Number: 87655
Company Name: ORION FOMES, LLC

ROBERT E. HAWK
SOURCE DYNAMICS LLC
ORION FOMES, LLC
12230 EAST DEL NORTE
YUMA, AZ 85367-7355

SUBJECT: Receipt of Registration Application Subject to Registration Service Fee

Dear Registrant:

The Office of Pesticide Programs has received your application and certification of payment. If you submitted data with this application, the results of the PRN-86-5 screen will be communicated separately. During the administrative screen, the Office of Pesticide Programs has determined that this Action is subject to a Pesticide Registration Service Fee as defined in the Pesticide Registration Improvement Act.

The Action has been identified as Action Code: R301

NEW PRODUCT;IDENTICAL OR SUBSTANTIALLY SIMILAR IN COMPOSITION AND USE TO A REGISTERED PRODUCT;REGISTERED SOURCE OF ACTIVE INGREDIENT;SELECTIVE DATA CITATION ONLY FOR DATA ON PRODUCT CHEMISTRY / ACUTE TOXICITY / PUBLIC HEALTH PEST EFFICACY, WHERE APPLICANT DOES NOT OWN ALL REQUIRED DATA NOR HAS AUTHORIZATION LETTER FROM DATA OWNER;

No additional payment is due at this time.

If you have any questions, please contact the Pesticide Registration Service Fee Ombudsman at (703) 308-9362.

Sincerely, Teresa Soriano
Front End Processing Staff
Information Technology & Resources Management Division

October 14, 2010

Document Processing Desk (APPL)
Office of Pesticide Programs (P7504C)
Environmental Protection Agency
Room S-4900, One Potomac Yard (South Building)
2777 S. Crystal Drive
Arlington, VA 22202

Attn: Kathryn Montague (PM 23), Registration Division

Dear Ms. Montague:

Subject: Fomesafen 2 SL Herbicide (87655-x); Registration Application

Orion Fomes, LLC wishes to apply for the registration of a new end-use product, Fomesafen 2 SL Herbicide. In support of this application we have enclosed the following:

Application for Pesticide Registration (8570-1)
Confidential Statement of Formula (8570-4)
Formulator's Exemption (8570-27)
Certification with Respect to Citation of Data (8570-34)
Data Matrix (8570-35)
Summary of Physical/Chemical Properties (8570-36)
Self-Certification Statement (8570-37)
Proposed label (6 copies)
Supporting studies (3 copies, with Data Transmittal Document)

One of the sources of technical material in this formulation is not registered at this time. However, we anticipate that it will be registered well before the PRIA approval date for this registration application.

We have concluded that this regulatory action falls in PRIA II Category R301, for which a fee of $1,720 is required. Please find proof of payment enclosed.

Please contact me if you have any questions.

Sincerely,

Robert Hawk

Robert Hawk
Source Dynamics LLC
Agent for Orion Fomes, LLC

DATA TRANSMITTAL DOCUMENT

Name and Address of Submitter
Orion Fomes, LLC
P. O. Box 21720
Mesa, AZ 85277

Regulatory Action in Support of Which This Package is Submitted
Application for Pesticide Registration
Fomesafen 2 SL Herbicide, EPA File Symbol 87655-x

Transmittal Date
October 14, 2010

List of Submitted Studies (3 Copies)

R. Hawk, "Fomesafen 2 SC Herbicide: Product Identity, Description of Materials, Manufacturing Process, Discussion of Impurities and Certification of Limits," Report SD1009C (September 15, 2010), 40 pages, OPPTS 830.1550, 830.1600, 830.1620, 830.1670 and 830.1750

Z. Wang, "Analysis of Fomesafen Soluble Concentrate Formulations: Enforcement Analytical Method," Report QH101001 (September 30, 2010), 10 pages, OPPTS 830.1800

Company Official: Robert Hawk, Agent Signature: Robert Hawk
Company Name: Orion Fomes, LLC
Company Contact: Robert Hawk
zaphawk@aol.com
telephone (928) 942-3489

draft Orion Fomes label Sept. 16, 2010

FOMESAFEN 2 SL HERBICIDE

For control of certain weeds in cotton, dry beans, snap beans and soybeans

GROUP 14 HERBICIDE

ACTIVE INGREDIENT

Sodium salt of
fomesafen [5-[2-chloro-4-trifluoromethyl)phenoxy]-*N*-(methylsulfonyl)-2-nitrobenzamide].....22.8%
OTHER INGREDIENTS:.....77.2%
TOTAL..... 100.0%

Contains 1,2-benzisothiazolin-3-one at 0.02% as a preservative
Equivalent to 21.7% fomesafen or 2 pounds per gallon fomesafen

KEEP OUT OF REACH OF CHILDREN
DANGER/PELIGRO

Si usted no entiende la etiqueta, busque al alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

See Additional Precautionary Statements and Directions for Use on label.

FIRST AID

IF IN EYES	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
IF SWALLOWED	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
IF INHALED	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.

For MEDICAL Emergencies 24 Hours a Day Call a Poison Control Center at 1-800-222-1222.
For CHEMICAL Emergency Assistance (Spill, Fire or Accident) Call ChemTrec at 1-800-424-9300
Have the product container or label with you when calling a Poison Control Center or doctor or going for treatment.

NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric lavage.

Orion Fomes, LLC
P.O. Box 21720
Mesa, AZ 85277
Tel. 480-218-4289

EPA Reg. No. 87655-x
EPA Est. No.
Net Contents: 2.5 gal

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER

CORROSIVE. CAUSES IRREVERSIBLE EYE DAMAGE. DUE TO CORROSIVE NATURE, MAY BE HARMFUL OR FATAL IF SWALLOWED. HARMFUL IF INHALED OR ABSORBED THROUGH SKIN. Do not get in eyes, on skin or on clothing. Avoid breathing vapors or spray mist.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as barrier laminate or Viton
- Shoes plus socks
- Protective eyewear

In addition, for aerial applications mixers and loaders handling more than 140 gallons of Fomesafen 2 SL Herbicide in any single workday must wear:

- Dust/mist filtering NIOSH-approved respirator with any N, R. P or HE filter.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instruction for washables exists, use detergent and hot water. Keep and wash PPE separately from other laundry.

When handlers use closed systems, enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)]. The handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash-waters. Do not apply when weather conditions favor drift from target area.

This chemical is known to leach through soil into groundwater under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.

PPE required for early entry into treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated such as plants, soil, or water, is:

- Coveralls
- Chemical-resistant gloves such as barrier laminate or Viton.
- Shoes plus socks
- Protective eyewear

GENERAL INFORMATION

Read all label directions before using.

Fomesafen 2 SL Herbicide is a selective herbicide which may be applied preplant surface, preemergence and/or postemergence for control or partial control of broadleaf weeds, grasses and sedges in cotton, dry beans, snap beans and soybeans.

Preplant Surface and Preemergence Applications

Certain germinating broadleaf weeds, grasses and sedges can be controlled or partially controlled by soil residual activity from either preplant surface or preemergence applications of Fomesafen 2 SL Herbicide. Moisture is necessary to activate Fomesafen 2 SL Herbicide in soil for residual

weed control. Dry weather following applications of Fomesafen 2 SL Herbicide may reduce effectiveness. When adequate moisture is not received after a Fomesafen 2 SL Herbicide application, weed control may be improved by overhead irrigation with at least a 1/4 inch of water.

Postemergence Applications

Fomesafen 2 SL Herbicide is generally most effective when used postemergence, working through contact action. Therefore, emerged weeds must have thorough spray coverage for effective control. Best broad-spectrum postemergence control of susceptible broadleaf weeds is obtained when Fomesafen 2 SL Herbicide is applied early to actively growing weeds. This usually occurs within 14 to 28 days after planting. Refer to the weed control tables for specific recommendations on weed growth stages and rates.

Some bronzing, crinkling or spotting of labeled crop leaves may occur following postemergence applications, but labeled crops soon outgrow these effects and develop normally.

Soil Characteristics

Application of Fomesafen 2 SL Herbicide to soils with high organic matter and/or high clay content may require higher rates than soils with low organic matter and/or low clay content. Refer to the Fomesafen 2 SL Herbicide Regional Use Map, weed control tables, and specific crop use sections for recommendations on use rates based on soil texture.

Environmental and Agronomic Conditions

Always apply Fomesafen 2 SL Herbicide under favorable environmental conditions that promote active weed growth. Avoid applying Fomesafen 2 SL Herbicide to weeds or labeled crops which are under stress from drought, extreme temperatures, excessive water, low humidity, low soil fertility, mechanical or chemical injury as reduced weed control and/or increased crop injury may result.

Rainfastness

Fomesafen 2 SL Herbicide requires a 1 hour rain-free period for best results when applied postemergence.

Cultivation

Cultivation prior to postemergence application is not recommended. Cultivation may put weeds under stress, reducing weed control. Timely cultivation 1-3 weeks after applying Fomesafen 2 SL Herbicide may assist weed control.

Information on Weed Resistance

Naturally occurring biotypes of certain broadleaf species with resistance to this herbicide and related products (same mode of action) are known to exist. Selection of resistant biotypes, through repeated use of these herbicides, may result in control failures.

If poor performance cannot be attributed to adverse weather conditions or improper application methods, a resistant biotype may be present. In such a case, additional treatments with this herbicide or similar mode of action products are not recommended. Consult your local company representative or agricultural advisor for assistance.

APPLICATION DIRECTIONS

Drift Management

Avoiding spray drift at the application site is the responsibility of the applicator and the grower. The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator and grower must consider the interaction of equipment and weather-related factors to ensure that the potential for drift to sensitive nontarget plants is minimal.

This pesticide may only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, nontarget plants) is minimal (i.e., when the wind is blowing away from the sensitive area).

Spray Additives

Only spray additives cleared for use on growing crops under 40 CFR 180.1001 may be used in spray mixture.

For Postemergence Applications Always Add One Of The Following Except in Tank Mix With Products Prohibiting Spray Additives:

Nonionic Surfactant (NIS) -Use NIS containing at least 75% surface active agent at 0.25 to 0.5% v/v (1-2 qts./100 gals.) of the finished spray volume.

Crop Oil Concentrate (COC) - Use a nonphytotoxic COC containing 15-20% approved emulsifier, at 0.5-1% v/v (0.5-1 gal./100 gals.) of the finished spray volume. COC can improve weed control but may slightly reduce crop tolerance.

Other Adjuvants -Adjuvants other than COC or NIS may be used providing the product meets the following criteria:

1. Contains only EPA exempt ingredients.
2. Is nonphytotoxic to the target crop.
3. Is compatible in mixture. (May be established through a jar test.)
4. Is supported locally for use with Fomesafen 2 SL Herbicide on the target crop through proven field trials and through university and extension recommendations.

Note: No adjuvants are needed for preplant surface or preemergence applications unless Fomesafen 2 SL Herbicide is being used in a burndown on emerged weeds.

Recommended Mixing Order:

1. Fill the spray tank with half the required amount of water and begin agitation.*
2. Add dry pesticide formulations.
3. Add Fomesafen 2 SL Herbicide Herbicide.
4. Add liquid pesticide formulations.
5. Add spray adjuvant and fertilizer (if used).
6. Add the remaining water and maintain agitation throughout the spray operation.

*Compatibility agent, 1 gallon/500 gallons of water or 0.2% v/v, may be added as needed.

GROUND APPLICATION Preplant Surface and Preemergence Application -Use a minimum of 10 gallons per acre. Nozzle selection should meet manufacturer's gallonage and pressure recommendations for preplant surface or preemergence applications.

Postemergence Application -Use sufficient spray volume and pressure to ensure complete coverage of the target weed. A spray volume of 10-20 gallons per acre and 30-60 psi at the nozzle tip is recommended. On large weeds and/or dense foliage, use 60 psi and a minimum of 20 gallons per acre to ensure coverage of weed foliage.

The use of flat fan nozzles will result in the most effective post-emergence application of

Fomesafen 2 SL Herbicide. Use nozzles that are set up to deliver medium quality spray (ASAE StandardS-572).

DO NOT USE FLOOD TYPE OR OTHER SPRAY NOZZLES, WHICH DELIVER COARSE, LARGE DROPLET SPRAYS.

BAND APPLICATIONS

Calculate the amount of herbicide and water volume needed for band treatment by the following formulas:

band width in inches / row width in inches	X	broadcast rate per acre	=	band herbicide rate per acre
band width in inches / row width in inches	X	broadcast volume per acre	=	band water volume per acre

Note: Thorough weed coverage is important for postemergence band applications. Best coverage is obtained with a minimum of two nozzles, one directed to each side of the planted row. Application with a single nozzle directed over the top of the row is not recommended for postemergence applications but is suitable for preemergence applications. Cultivation of untreated areas may be needed following band applications. When making postemergence band applications and cultivating in the same operation, position nozzles in advance of the cultivation device. This will reduce dust in the spray area. Dust can intercept spray, reducing weed coverage resulting in less than adequate weed control.

AERIAL APPLICATION

Use sufficient spray volume and pressure to ensure complete coverage of the target. A minimum of 5 gallons per acre of spray mixture should be applied with a maximum of 40 PSI pressure. When foliage is dense, use a minimum of 10 gallons per acre to ensure coverage of weed foliage.

DO NOT APPLY THIS PRODUCT THROUGH ANY TYPE OF IRRIGATION SYSTEM.

GENERAL PRECAUTIONS

- A maximum of 1.5 pts. of Fomesafen 2 SL Herbicide **(or a maximum of 0.375 lb. a.i./A of fomesafen from any product containing fomesafen)** may be applied per acre per year in Region 1 (see Regional Use Map).
- A maximum of 1.5 pts. of Fomesafen 2 SL Herbicide **(or a maximum of 0.375 lb. a.i./A of fomesafen from any product containing fomesafen)** may be applied per acre in ALTERNATE years in Region 2 (see Regional Use Map).
- A maximum of 1.25 pts. of Fomesafen 2 SL Herbicide **(or a maximum of 0.313 lb. a.i./A of fomesafen from any product containing fomesafen)** may be applied per acre in ALTERNATE years in Region 3 (see Regional Use Map).
- A maximum of 1 pt. of Fomesafen 2 SL Herbicide **(or a maximum of 0.25 lb. a.i./A of fomesafen from any product containing fomesafen)** may be applied per acre in ALTERNATE years in Region 4 (see Regional Use Map).
- A maximum of 0.75 pt. of Fomesafen 2 SL Herbicide **(or a maximum of 0.1875 lb. a.i./A**

of fomesafen from any product containing fomesafen) may be applied per acre in ALTERNATE years in Region 5 (see Regional Use Map).

- Thoroughly clean the spray system with water and a commercial tank cleaner before and after each use.
- Tank mixes of Fomesafen 2 SL Herbicide with other pesticides, fertilizers or any other additives except as specified on this label or other approved Source Dynamics supplemental labels may result in tank-mix incompatibility, unsatisfactory performance or unsatisfactory crop injury.
- Avoid overlapping spray swaths, as injury may occur to rotational crops.
- To provide adequate coverage, it is recommended that groundspeed not exceed 10 mph during application.
- Avoid drift to all other crops and nontarget areas. Crops other than those labeled may be severely injured by drift. Do not apply when wind velocity exceeds 15 mph.
- Do not make ground or aerial application during temperature inversions.

Replanting

If replanting is necessary in fields previously treated with Fomesafen 2 SL Herbicide, the field may be replanted to cotton, dry beans, snap beans or soybeans. During replanting, a minimum of tillage is recommended to preserve the herbicide barrier for effective weed control. Do not apply a second application of Fomesafen 2 SL Herbicide or other fomesafen containing product as crop injury or illegal residues may occur in harvested crops. If tank-mix combinations were used, refer to product labels for any additional replanting instructions.

ROTATIONAL CROP RESTRICTIONS

The following rotational crops may be planted after applying Fomesafen 2 SL Herbicide at recommended rates:

Crop to be Planted	**Minimum Rotation Interval (Months After Last Fomesafen Application)**
Cotton, dry beans, snap beans and soybeans	0
Small grains such as wheat barley and rye	4
Corn*, peanuts, peas, rice and seed corn	10
To avoid crop injury do not plant alfalfa, sunflowers, sugar beets, sorghum** or any other crop within	18

Do not graze rotated small grain crops or harvest forage or straw for livestock.

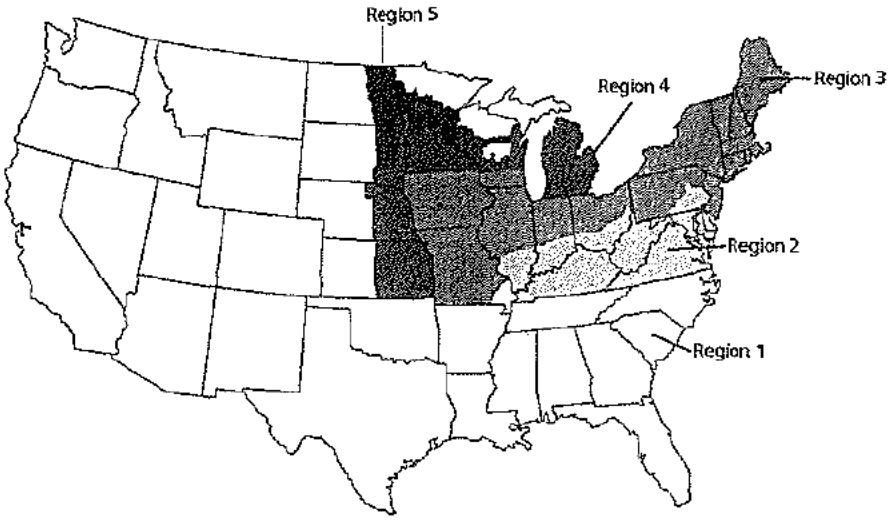
*Use a 12 month minimum rotation interval for popcorn in the states of Ohio, Kentucky, Illinois, Indiana, Iowa, and Region 4 when applied at rates of 1.0 pint per acre or more.

*Use 18 month minimum rotation interval for sweet corn in the states of Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, Vermont and Region 5.

**Sorghum may be planted back after 10 months in Region 1.

USE RATES AND WEEDS CONTROLLED

FOMESAFEN 2 SL REGIONAL USE MAP



REGION 1(Maximum Rate 1.5 pts./A per year)

REGION 1-Includes the following states or portion of states where Fomesafen 2 SL Herbicide may be applied: Alabama, Arkansas, Georgia, Louisiana, Mississippi, Missouri (counties of Bollinger, Butler, Cape Giradeau, Dunklin, Madison, Mississippi, New Madrid, Pemiscot, Perry, Ripley, Scott, Stoddard and Wayne), North Carolina, Oklahoma (East of U.S. Highway 75 and East of Indian Nation Parkway), South Carolina, Tennessee, and Texas

(includes area East of U.S. Highway 77 to State Road 239 including all of Calhoun County).

REGION 2 (Maximum Rate 1.5 pts./A, alternate years)

REGION 2 -Includes the following states or portion of states where Fomesafen 2 SL Herbicide may be applied: Delaware, Kentucky, Maryland, Virginia, West Virginia, South of Interstate 70 in the following states: Illinois, Indiana and Ohio and all areas South of Interstate 80 to the intersection of U.S. Highway 15 and East of U.S. Highway 15 and U.S. Highway 522 in Pennsylvania.

REGION 3 (Maximum Rate 1.25 pts./A, alternate years)

REGION 3 -Includes the following states or portion of states where Fomesafen 2 SL Herbicide may be applied: Connecticut, Iowa, Maine, Massachusetts, Missouri (all counties except for those listed in Region 1), New Hampshire, New Jersey, New York, Pennsylvania (all areas except those listed in Region 2), Rhode Island, Vermont and Wisconsin (South of U.S. Highway 18 between Prairie Du Chien and Madison, and South of Interstate 94 between Madison and Milwaukee),

andNorth of Interstate 70 in following states: Indiana, Illinois and Ohio.

REGION 4 (Maximum Rate 1 pint per acre, alternate years)

REGION 4 -Includes the following states or portion of states where Fomesafen 2 SL Herbicide may be applied: Kansas (all counties East of or intersected by U.S. Highway 281), Michigan (Southern Peninsula), Minnesota (all areas South of Interstate 94), Nebraska (all counties East of or intersected by U.S. Highway 281), and Wisconsin (all areas, except those in Region 3, South of Interstate 94 from Minnesota state line to Eau Claire and South of U.S. Highway 29 from Eau Claire to Green Bay plus Barron, Chippewa, Clark, Door, Dunn, Eau Claire, Kewaunee, Marathon, Menominee, Oconto, Polk, Shawano, and St. Croix counties. The following counties are excluded: Adams, Marquette, Portage, Waupaca, Waushara and Wood). North Dakota (all areas East of Interstate 29 from Fargo South to the South Dakota state line). South Dakota (all areas East of Interstate 29 from the North Dakota state line to Watertown, all areas East of Highway 81 from Watertown to Madison and all areas East and South of State Road 34 and U.S. Highway 281 to the Nebraska state line).

REGION 5 (Maximum Rate 0.75 pint per acre, alternate years)

REGION 5 -Includes the following states or portion of states where Fomesafen 2 SL Herbicide may be applied: North Dakota (all areas East of U.S. Highway 281 except those areas in Region 4), South Dakota (all areas East of U.S. Highway 281 except those areas in Region 4) and Minnesota (all areas South of U.S. Highway 2 except those areas in Region 4).

WEEDS CONTROLLED

Table 1: Weeds controlled or partially controlled* by preemergence activity of Fomesafen 2 SL at 1 to 1.5 pints per acre**

Broadleaf Weeds Controlled	Soil Texture	Organic Matter
Amaranth, Palmer	All soil types	Up to 0.5%
Croton, tropic***		
Eclipta		
Galinsoga spp.		
Lambsquarters, common		
Morningglory, smallflower		
Nightshade, black		
Nightshade, Eastern black		
Pigweed, redroot		
Pigweed, smooth		
Poinsettia, wild		
Purslane, common		
Ragweed, common***		
Sida, prickly***		
Starbur, bristly		
Broadleaf Weeds Partially Controlled*		
Anoda, spurred		
Cocklebur, common		
Morningglory, entireleaf		
Morninglory, ivyleaf		
Morningglory, pitted		
Morningglory, red/scarlet		
Morningglory, tall		
Nightshade, hairy		
Ragweed, giant		
Waterhemp, common		
Sedges Partially Controlled*		
Nutsedge, yellow		

*Partial control means significant activity but not always at a level considered acceptable for commercial weed control.
**Use the higher endof the rate range when heavy weedpopulations are anticipated.
***Rates less than 1.5 pts/A will provide only partial control of this weed.

Table 2: Weeds Controlled or Partially Controlled* by Postemergence Activity of Fomesafen 2 SL Herbicide

Weed	Fomesafen 2L Rate (pints per acre) Maximum Growth Stage Controlled At			
	0.75 pt/A No. of True Leaves	1 pt/A No. of True Leaves	1.25 pt/A No. of True Leaves	1.5 pt/A No. of True Leaves
Anoda, spurred	--	--	--	2
Balloonvine	--	--	2[c]	2
Carpetweed	--	6" diameter size	multi-leaf 6" diameter	unlimited size
Citron (wild watermelon)	--	2	2	4
Cocklebur, common[a,b]	--	--	2	4
Copperleaf, hophornbeam	--	2	2	4
Copperleaf, Virginia	--	2	2	4
Crotalaria, showy	--	4	4	6
Croton, tropic	--	2	2	4
Cucumber, volunteer	--	4	4	6
Eclipta	--	2	2	4
Groundcherry, cutleaf	--	4	4	6
Hemp[b]	--	--	4	6
Horsenettle[b]	--	2[c]	3[c]	4[c]
Jimsonweed	2	4	6	8
Ladysthumb	--	2	2	4
Lambsquarters, common[c]	--	2	2	2
Mexicanweed	--	2[c]	2[c]	2
Morningglory:				
Cypressvine	--	4	4	6
Entireleaf var.	2[c]	2	2	4
Ivyleaf	2[c]	2	2	4
Purple moonflower	--	2	4	4
Red (scarlet)	--	2	2	4
Smallflower	--	2	2	4
Pitted (smallwhite)	--	4	4	4
Tall (common)	2[c]	2	2	3
Palmleaf (willowleaf)	--	2	2	4
Mustard, wild	2	4	6	8
Nightshade, black	2	4	4	4

Table 2 (continued): Weeds Controlled or Partially Controlled* by Postemergence Activity of Fomesafen 2 SL Herbicide

Weed	Fomesafen 2L Rate (pints per acre) Maximum Growth Stage Controlled At			
	0.75 pt/A No. of True Leaves	1 pt/A No. of True Leaves	1.25 pt/A No. of True Leaves	1.5 pt/A No. of True Leaves
Nutsedge, yellow	--	--	--	suppression only
Pigweed:				
Amaranth, Palmer	2[c]	4	4	6
Amaranth, spiny	2[c]	2	2	4
Redroot	2[c]	4	6	6
Smooth	2[c]	4	4	6
Poinsettia, wild	--	--	--	3
Purslane, common	--	multi-leaf 6" diameter	multi-leaf 6" diameter	multi-leaf 8" diameter
Pusley, Florida	--	--	--	2
Ragweed, common	2	4	4	6
Ragweed, Giant[b]	--	--	4	4
Redweed	--	--	--	3c
Sesbania, hemp	--	6	6	12
Sicklepod	--	--	--	cotyledon[c]
Sida, prickly	--	--	--	cotyledon[c]
Smartweed, Pennsylvania	2[c]	4	4	6
Smellmelon	--	--	--	2
Spurge, prostrate	--	--	--	1" diameter[c]
Spurge, spotted	--	--	--	2c
Starbur, bristly	--	2	2	4
Sunflower, common	--	--	--	2
Velvetleaf[b]	--	--	2	4
Venice mallow	2	4	4	6
Witchweed	--	multi-leaf up to 7"	multi-leaf up to 7"	multi-leaf up to 10"
Waterhemp, common	2[c]	2	2	4
Waterhemp, tall	2[c]	2	2	4
Yellow rocket	2	4	6	6

*Partial control means significant activity but not always at a level considered acceptable for commercial weed control.

[a]Do not apply in cotyledon stage.

[b]For effective control of this weed it is necessary to use 1% MSO and 2.5% UAN v/v as an adjuvant in Regions 2 and 3 (soybeans only).

[c]Partial control.

SPECIAL USE DIRECTIONS FOR SPECIAL WEED PROBLEMS

Partial Control* of Annual Grasses

The grasses listed below may be partially controlled by preemergence applications of Fomesafen 2 SL Herbicide at 1-1.5 pts./A.

Crabgrass
Goosegrass
Panicum, Texas
Signalgrass, broadleaf

The grasses listed below may be partially controlled by postemergence applications of Fomesafen 2 SL Herbicide at 1-1.5 pts./A.

Barnyardgrass
Signalgrass, broadleaf
Crabgrass
Foxtail
- Giant
- Green
- Yellow

Goosegrass
Johnsongrass, seedling
Panicum, fall
Panicum, Texas

Partial Control* of Perennial Weeds

Use of Fomesafen 2 SL Herbicide postemergence at rates of 1-1.5 pts./A will aid in suppressing the above-ground portions of the weeds listed below until crop canopy can assist in suppression. Perennial weeds continue to regrow from underground rootstocks even if above-ground foliage is temporarily controlled or retarded. Even though Fomesafen 2 SL Herbicide and crop competition can suppress perennial weeds for a growing season, the rootstocks will continue to live and reestablishment will occur in subsequent years.

Milkweed, climbing
Milkweed, honeyvine
Bindweed, field
Bindweed, hedge
Trumpetcreeper

*Partial control means significant activity but not always at a level considered acceptable for commercial weed control.

CROP USE DIRECTIONS

COTTON Preemergence Application

Apply Fomesafen 2 SL Herbicide preemergence at 1-1.5 pts./A in cotton for control or partial control of the weeds listed in Table 1. Apply as a preemergence treatment only to coarse textured soils (sandy loam, loamy sand, sandy clay loam). **Do not** apply as a preemergence treatment to

medium or fine-textured soils as crop injury will likely occur.

To broaden the weed control spectrum, Fomesafen 2 SL Herbicide may be tank mixed with other preemergence herbicides such as Caparol®, Cotoran®, Direx®, Karmex®, Solicam®, or Staple®. For control of emerged weeds, Fomesafen 2 SL Herbicide may be tank mixed with a burndown herbicide such as Paraquat Concentrate or glyphosate brands (such as Touchdown®, Roundup®) labeled in cotton. In reduced tillage plantings, Fomesafen 2 SL Herbicide can be applied up to 14 days prior to planting or at planting with a burndown herbicide. Refer to the tank-mix partner label for use directions, restrictions and limitations. The most restrictive product labeling applies.

Cotton plants are tolerant to preemergence applications of Fomesafen 2 SL Herbicide when applied at recommended rates and to coarse textured soil types. Some crinkling or spotting of cotton foliage or stunting may occur, especially if heavy rainfall occurs during or soon after cotton emergence, but cotton plants normally outgrow these effects and develop normally.

Cotton foliage is not tolerant to Fomesafen 2 SL Herbicide. Do not apply Fomesafen 2 SL Herbicide over the top of emerged cotton as unacceptable cotton injury will occur.

Post-Directed Application

Apply Fomesafen 2 SL Herbicide in emerged cotton as a post-directed treatment using precision post-directed, hooded or shielded application equipment to provide complete coverage of emerged weeds. Apply Fomesafen 2 SL Herbicide at 1-1.5 pints per acre in a minimum of 10 gallons spray solution per acre. Applications may be made broadcast or banded. Post-directed applications of Fomesafen 2 SL Herbicide will provide contact control of labeled emerged weeds and residual preemergence control of labeled weeds (once activated by rainfall or irrigation). See previous label sections for a list of weeds controlled, recommended application rates, weed growth stages, and application directions.

U.S. Label

Fomesafen 2 SL Herbicide should be applied with a non-ionic surfactant at 0.25 to 0.5% v/v, or crop oil concentrate at 1% v/v to emerged weeds. Do not add liquid nitrogen (28% or similar) to Fomesafen 2 SL Herbicide, or Fomesafen 2 SL Herbicide tank mixes in cotton.

To broaden the weed control spectrum, post-directed applications of Fomesafen 2 SL Herbicide may be tank mixed with other labeled post-directed herbicides such as Caparol, DSMA, Direx, Dual MAGNUM®, Envoke®, Karmex, Layby™ Pro, MSMA, Sequence®, or Suprend®. When applied with hooded or shielded sprayers, Fomesafen 2 SL Herbicide and Fomesafen 2 SL Herbicide tank mixes may be applied with burndown products such as Paraquat Concentrate, Sequence or glyphosate brands (such as Touchdown, Roundup) labeled for in crop application in cotton. Refer to the tank-mix partner label for use directions, restrictions and limitations. The most restrictive product labeling applies.

Cotton foliage is not tolerant to Fomesafen 2 SL Herbicide applications. Avoid contact to cotton foliage as unacceptable injury will occur. Application equipment should be calibrated (spray pressure, nozzle type and configuration, and orifice size) to avoid fine spray droplets contacting green cotton stems and foliage.

Post-Directed Application Timing in Cotton

Fomesafen 2 SL Herbicide may be applied to cotton at least 6 inches in height through layby as a post-directed application. All post-directed applications should avoid spray contact with any green non-barked parts of the cotton plant or foliage as unacceptable injury will occur. Follow the application timing recommendations below for post-directed applications in cotton.

Shield and Hooded Applications

Make a precision post-directed Fomesafen 2 SL Herbicide application to the base of the cotton plant avoiding contact with the cotton stem or foliage when cotton is at least 6 inches in height to avoid cotton injury. Use only hooded or shielded spray equipment to apply Fomesafen 2 SL Herbicide in cotton that is 6 inches to 12 inches in height. Adjust nozzles to provide full coverage of emerged target weeds.

Layby Applications

Make a post-directed Fomesafen 2 SL Herbicide application to the base of the cotton plant avoiding contact with any non-barked portion of the cotton plant or foliage. Use precision post-directed equipment or hooded or shielded sprayers on cotton that has developed a minimum of 4 inches of brown bark through layby. Application equipment should be configured to provide full coverage of emerged target weeds.

General Restrictions - Cotton

Do not apply Fomesafen 2 SL Herbicide later than 70 days before harvest.

Do not apply more than 1.5 pints per acre of Fomesafen 2 SL Herbicide in any year.

Special Use Directions for the Suppression of Woollyleaf Bursage (Lakeweed), *Ambrosia grayi*, in Texas

Apply Fomesafen 2 SL Herbicide to cultivated areas of cropland in the fall or spring as a spot treatment at a rate of 1.5 pints per acre and incorporate to a depth of 2-3 inches for suppression of woollyleaf bursage. Applications should be made with ground equipment.

The use of adjuvants, as specified under the Spray Additives section, will significantly improve the initial burndown of any emerged woollyleaf bursage, but this effect is only temporary. Therefore, an adjuvant may be used if desired, but is not necessary.

Significant suppression may not be seen until 6-8 months after application, but should then continue for at least 2 years after application. Cotton or soybeans may be planted in treated areas. Under certain conditions, significant damage may occur to cotton planted within 18 months of application. A 3-year interval from last application to planting is required for all other crops.

Do not make more than one application of Fomesafen 2 SL Herbicide per year. Do not apply more than 1.5 pints per acre of Fomesafen 2 SL Herbicide in any year. If two consecutive year applications are made, allow a 2 year interval before another application.

DRY BEANS AND SNAP BEANS Preplant Surface and Preemergence Application

Apply Fomesafen 2 SL Herbicide as a preplant surface or preemergence application in Regions 1, 2, 3, and 4 only for control or partial control of the weeds listed in Table 1. Fomesafen 2 SL Herbicide can be applied alone, or tank mixed or followed sequentially with other labeled dry bean or snap bean herbicides to broaden the weed control spectrum or control newly emerged weeds. Refer to the **Tank Mix and Sequential Application** section for additional information.

NOTE: Treated soil that is splashed onto newly emerged seedings may result in temporary crop injury but plants normally outgrow these effects and develop normally.

Postemergence Application

Apply Fomesafen 2 SL Herbicide as a postemergent broadcast application in Regions 1, 2, 3, 4 and 5 for control or partial control of the weeds listed in Table 2 and in the Special Use

Directions For Additional Weed Problems section. Application rate depends on weed species and growth stage. Two applications may be made if necessary but not to exceed the maximum rate specified per geographic region. (Refer to map for definition of specified geographic regions). Refer to the Spray Additive section for recommended spray additives. Use of crop oil concentrate can improve weed control but may slightly reduce crop tolerance. Do not use UAN (28% or similar) or ammonium sulfate on dry beans or snap beans as severe crop injury may occur. Apply when dry beans or snap beans have at least one fully expanded trifoliate leaf.

Fomesafen 2 SL Herbicide can be applied alone or in tank mix with other labeled dry bean or snap bean postemergence herbicides to broaden the weed control spectrum. Refer to the **Tank Mix and Sequential Application** section.

Some bronzing, crinkling or spotting of dry bean or snap bean leaves may occur following postemergent applications, but dry beans and snap beans soon outgrow these effects and develop normally.

Tank Mix and Sequential Applications for Dry Beans and Snap Beans
Fomesafen 2 SL Herbicide can be used sequentially or in tank mix with the following products:

Dry Beans and Snap Beans	Dry Beans Only
Assure II®	Frontier®
Basagran®	Select®
Dual MAGNUM	Sonalan®
Eptam®	
Poast®	
Prowl®	
Pursuit®	
Raptor®	
Treflan®	

Under certain conditions, the mixture of Fomesafen 2 SL Herbicide with one or more of the above mentioned broadleaf herbicides may cause a reduction in activity of any postemergence grass herbicide in the mixture.

For sequential applications allow 2-3 days after the application of the postemergence grass herbicide before applying Fomesafen 2 SL Herbicide or Fomesafen 2 SL Herbicide mixtures. Where Fomesafen 2 SL Herbicide or the Fomesafen 2 SL Herbicide mixture is appliedfirst, apply the grass herbicide when the grass weeds begin to develop new leaves (generally around 7 days).

NOTE: Tank-mix applications can result in increased crop injury as compared to either product used alone.

Always read and follow the recommendations, restrictions and limitations for all products whether used alone, sequentially or in a tank mix. The most restrictive labeling of any product used applies.

General Restrictions – Dry Beans and Snap Beans

- Refer to Fomesafen 2 SL Herbicide Regional Use Map for the maximum rate of Fomesafen 2 SL Herbicide (or other fomesafen containing products) that may be applied in each geographic region.
- Do not apply to any field in Regions 2, 3, 4 or 5 more than once every two years.

- **For snap beans:** Do not exceed 1.5 pints of Fomesafen 2 SL Herbicide per acre in any one year and also adhere to the maximum rate that may be applied in each geographic region (refer to the Fomesafen 2 SL Herbicide Regional Use Map). Do not graze treated areas or harvest for forage or hay. Do not utilize hay or straw for animal feed or bedding. Do not apply within 30 days of harvest.
- **For dry beans:** Do not exceed 1.5 pints of Fomesafen 2 SL Herbicide per acre in any one year and also adhere to the maximum rate that may be applied in each geographic region (refer to the Fomesafen 2 SL Herbicide Regional Use Map). Do not graze animals on green forage or stubble. Do not utilize hay or straw for animal feed or bedding. Do not apply within 45 days of harvest.

SOYBEANS Preplant Surface and Preemergence Application

Apply Fomesafen 2 SL Herbicide as a preplant surface or preemergence application in Regions 1, 2, 3, and 4 only for control or partial control of the weeds listed in Table 1. Fomesafen 2 SL Herbicide can be applied alone or tank mixed or followed sequentially with other labeled soybean herbicides to broaden the weed control spectrum or control newly emerged weeds. Refer to the **Tank Mix and Sequential Application** section for additional information.

For control of emerged weeds, Fomesafen 2 SL Herbicide may be tank mixed with a burndown herbicide such as Paraquat Concentrate or glyphosate brands (such as Touchdown or Roundup) labeled in soybeans. In reduced tillage plantings, Fomesafen 2 SL Herbicide can be applied up to 14 days prior to planting or at planting with a burndown herbicide.

Postemergence Application

Apply Fomesafen 2 SL Herbicide as a postemergence broadcast application in Regions 1, 2, 3, 4 and5 for control or partial control of weeds listed in Table 2 and in the **Special Use Directions For Additional Weed Problems** section. Application rate depends on weed species and growth stage. Refer to the Spray Additive section for recommended spray additives. To enhance postemergence control of susceptible broadleaf weeds (**soybeans only**) in Regions 2, 3, 4 and 5 (see Fomesafen 2 SL Herbicide Regional Use Map), Fomesafen 2 SL Herbicide can be used with a minimum of 2.5% liquid nitrogen (28% or similar) or a minimum of 10 pounds ammonium sulfate per 100 gallons of spray volume.
Fomesafen 2 SL Herbicide can be applied alone or in combination with other labeled soybean postemergence herbicides to broaden the weed control spectrum. Refer to the **Tank Mix and Sequential Application** section.

Some bronzing, crinkling or spotting of soybean leaves may occur following postemergent applications, but soybeans soon outgrow these effects and develop normally.

Tank Mix and Sequential Applications For Soybeans

Fomesafen 2 SL Herbicide can be used sequentially or in tank mix with one or more of the following products: Assure II, Basagran, Boundary®, Butyrac®, Classic®, Dual MAGNUM, Dual II MAGNUM®, FirstRate®, Fusilade® DX, Fusion®, Glyphosate (such as Touchdown, Roundup or Glyphomax™), Paraquat Concentrate, Harmony® GT XP, Pursuit, Poast, Poast Plus®, Prowl, Raptor, Resource®, Select®, Sequence, Scepter®, and Synchrony®STS®.

Under certain conditions, the mixture of Fomesafen 2 SL Herbicide with one or more of the above mentioned broadleaf herbicides may cause a reduction in activity of any postemergence grass herbicide in the mixture.

For sequential applications allow 2-3 days after the application of the postemergence grass

herbicide before applying Fomesafen 2 SL Herbicide or Fomesafen 2 SL Herbicide mixtures. Where Fomesafen 2 SL Herbicide or the Fomesafen 2 SL Herbicide mixture is applied first, apply the postemergence grass herbicide when the grass weeds begin to develop new leaves (generally around 7 days).

NOTE:

- Tank-mix applications can result in increased crop injury as compared to either product used alone.
- Do not exceed 1 fl. oz. of Butyrac per acre in mixture with Fomesafen 2 SL Herbicide.
- Do not exceed 0.25 oz./A of Synchrony STS herbicide in the tank with labeled rates of Fomesafen 2 SL Herbicide on non-STS varieties. This tank mix can be applied postemergence to any soybean variety for additional broadleaf weed control. Refer to the Synchrony STS label for more information and crop rotation restrictions.
- Always read and follow the recommendations, restrictions and limitations for all products whether used alone, sequentially or in a tank mix. The most restrictive labeling of any product used applies.

Roundup Ready® (Glyphosate Tolerant) Soybean Tank Mixes

Fomesafen 2 SL Herbicide at 6-12 oz./A, can be tank mixed with glyphosate products (such as Touchdown or Roundup) that are labeled for Roundup Ready (glyphosate tolerant) soybeans for improved postemergence control of many weeds such as morningglory spp., hemp sesbania, waterhemp, and black nightshade which are known to have tolerance to glyphosate, but are susceptible to Fomesafen 2 SL Herbicide.

FOLLOW THE RECOMMENDATIONS ON THE GLYPHOSATE PRODUCT LABEL FOR THE USE OF SPRAY ADDITIVES IN THIS TANK MIX.

Do not allow this tank mix to move off target as contact by even minute quantities can cause severe damage or death to any nontarget vegetation.

NOTE: Postemergence application of this tank mix on soybean varieties which do not contain the Roundup Ready gene will result in severe crop injury or death of the soybean crop. Always read and follow the recommendations, restrictions and limitations for all products used. The most restrictive labeling of any product applies.

General Restrictions – Soybeans

- Refer to Fomesafen 2 SL Herbicide Regional Use Map for the maximum rate of Fomesafen 2 SL Herbicide (or other fomesafen containing products) that may be applied in each geographic region. Do not apply to any field in Regions 2, 3, 4 or 5 more than once every two years.
- Do not exceed 1.5 pints of Fomesafen 2 SL Herbicide per acre in any one year and also adhere to the maximum rate that may be applied in each geographic region (refer to the Fomesafen 2 SL Herbicide Regional Use Map). Do not graze treated areas or harvest for forage or hay. Do not apply within 45 days of harvest.

AERIAL SPRAY DRIFT MANAGEMENT ADVISORY

SPRAY DRIFT MANAGEMENT

AVOIDINGSPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR. The interaction of many equipment and weather related factors determines the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

1. 1. The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
2. 2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they should be observed.

The applicator should be familiar with and take into account the information covered in the **Aerial Drift Reduction Advisory Information.**

Aerial Drift Reduction Advisory Information IMPORTANCE OF DROPLET SIZE

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (See **Wind, Temperature and Humidity,** and **Temperature Inversion** sections of this label).

CONTROLLING DROPLET SIZE

- **Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** - Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of nozzles** -Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation** -Orienting nozzles so that the spray is released backwards, parallel to the airstream will produce larger droplets than other orientations. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type** - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce larger droplets than other nozzle types.

BOOM LENGTH

For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

APPLICATION HEIGHT

Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

SWATH ADJUSTMENT
When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller drops, etc.).

WIND
Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. **NOTE:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

TEMPERATURE AND HUMIDITY
When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

TEMPERATURE INVERSIONS
Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

SENSITIVE AREAS
The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, nontarget crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

APPENDIX

COMMON NAME	SCIENTIFIC NAME
Amaranth, Palmer	*Amaranthus palmeri*
Amaranth, spiny	*Amaranthus spinosus*
Anoda, spurred	*Adoda cristata*
Balloonvine	*Cardiospermum halicacabum*
Barnyardgrass	*Echinochloa crus-galli*
Bindweed, field	*Convolvulus arvensis*
Bindweed, hedge	*Calystegia sepium*
Broadleaf signalgrass	*Bracharia platyphylia*
Carpetweed	*Mullugo verticillata*
Citron (wild watermelon)	*Citrullus vulgaris*
Cocklebur, common	*Xanthium strumarium*
Copperleaf, hophornbeam	*Acalypha ostryifolia*
Copperleaf, Virginia	*Svs;ufjs bothomovs*
Crabgrass	*Digitaria* spp.
Crotalaria, showy	*Crotolaria spectabilis*
Croton, tropic	*Croton glandulosus*
Cucumber, volunteer	*Cucumis sativas*
Eclipta	*Eclipta prostrate*
Foxtail, giant	*Setaria faberi*
Foxtail, green	*Setaria virdis*
Foxtail, yellow	*Setaria glauca*
Goosegrass	*Eleusine indica*
Groundcherry, cutleaf	*Physalis angulata*
Hemp	*Cannabis sativa*
Horsenettle	*Solanum carolinense*
Jimsonweed	*Datura stramonium*
Johnsongrass, seedling	*Sorghum halapense*
Ladysthumb	*Polygonum persicaria*
Lambsquarters, common	*Chenopodium album*
Mexicanweed	*Caperonia castanifolia*
Milkweed, climbing	*Sarcostemma cyanchoides*
Milkweed, honeyvine	*Ampelamus albidus*
Morningglory:	
Cypressvine	*Ipomoea quamoclit*
Entireleaf var.	*Ipomoea hederacea* var. *intergriuscula*
Ivyleaf	*Ipomoea hederacea*
Purple moonflower	*Ipomoea turbinate*
Red (scarlet)	*Ipomoea coccinea*
Smallflower	*Jacquemontia tamnifolia*
Pitted (smallwhite)	*Ipomoea lacunose*
Tall (common)	*Impmoea purpurea*
Palmleaf (willowleaf)	*Impmoea wrightii*
Mustard, wild	*Sinapis arvensis*

COMMON NAME	SCIENTIFIC NAME
Nightshade, black	*Solanum nigrum*
Nightshade, Eastern black	*Solanum ptychanthum*
Nightshade, hairy	*Solanum physalifolium*
Nutsedge, yellow	*Cyperus esculentus*
Panicum, fall	*Panicum dichotomiflorum*
Panicum, Texas	*Panicum texanum*
Pigweed:	
Amaranth, Palmer	*Amaranthus palmeri*
Amaranth, spiny	
Redroot	*Amaranthus retroflexus*
Smooth	*Amaranthus hybridus*
Poinsettia, wild	*Euphorbia heterophylla*
Purslane, common	*Portulaca oleracea*
Pusley, Florida	*Richardia scabra*
Ragweed, common	*Ambrosia artemisifolia*
Ragweed, Giant	*Ambrosia trifida*
Redweed	*Melchia corchorifolia*
Sesbania, hemp	*Sesbania exaltata*
Sicklepod	*Senna obtusifolia*
Sida, prickly	*Sida spinosa*
Signalgrass, broadleaf	*Bracharia platyphylia*
Smartweed, Pennsylvania	*Polygonum pennsylvanicum*
Smellmelon	*Cucumis melo*
Spurge, prostrate	*Chamaesyce humistrata*
Spurge, spotted	*Chamaesyce maculate*
Starbur, bristly	*Acanthospermum hispidum*
Sunflower, common	*Helianthus annuus*
Trumpetcreeper	*Campis redicans*
Velvetleaf	*Abutilon theophrasti*
Venice mallow	*Hibiscus trionum*
Waterhemp, common	*Amaranthus rudis*
Waterhemp, tall	*Amaranthus tuberculatos*
Witchweed	*Striga asiatica*
Yellow rocket	*Barbarea vulgaris*

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

Prohibitions
Open dumping is prohibited. Do not reuse empty container.

Pesticide Storage
Store above 32°F in original containers only. If product freezes, return to room temperature and agitate to reconstitute. Keep container closed when not in use. Do not store near food or feed. In case of spill or leak on floor or paved surfaces, soak up with sand, earth or synthetic absorbent. Remove to chemical waste area.

Pesticide Disposal
Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

Container Handling
Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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Pages 148-155 *Confidential Statements of Formula may be entitled to confidential treatment*

Fomesafen 2 SL Herbicide: 87655-x
Robert Hawk
to:
Shyam Mathur
02/04/2011 05:40 PM
Show Details

Dear Dr. Mathur,

Thank you for your call today. I apologize for the errors on the CSF. Corrected CSFs are attached. I have also made a minor correction on percentages.

The label guarantees 22.8% fomesafen-sodium [redacted]

[redacted]

Thanks again and best regards.

Bob

Robert Hawk
Registration Manager
Source Dynamics LLC
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Pages 157-158 *Confidential Statements of Formula may be entitled to confidential treatment*